

We have Arcadis over today for the Port meeting tomorrow and it will have the Technical Officer meeting at HDF, Trinity so that we can have a full discussion on their work going forward. There will still be a Teams link for those who cannot make it. The Minister for the Environment will Teams in if he is available.

Join on your computer or mobile app

Or call in (audio only)

+44 20 3321 5250,,150107520# <tel:+442033215250,,150107520#> United Kingdom, London

Phone Conference ID: 150 107 520#

Find a local number <<https://dialin.teams.microsoft.com/61ed3c3f-fe55-4f5a-9396-712728283172?id=150107520>> | Reset PIN
<<https://mysettings.lync.com/pstnconferencing>>

Learn More <<https://aka.ms/JoinTeamsMeeting>> | Meeting options <https://teams.microsoft.com/meetingOptions/?organizerId=e6416251-63e1-4eb9-a6c9-fb4867c503a1&tenantId=2b561511-7ddf-495c-8164-f56ae776c54a&threadId=19_meeting_MjUyYzdkOTAtNTcyMC00ZGRILTg4MWYtNjUyZDY1YzE2ODdm@thread.v2&messageId=0&language=en-US>

Care : If you have received this email and it was not intended for you, please reply to the sender, and then delete it. Please treat our information in confidence. This communication may contain legal advice which is confidential and/or privileged. It should not be forwarded or copied to anyone else without the prior permission of the sender.

Contract : This email does not form any binding agreement unless it is supported by an official States of Jersey purchase order form.

Content : All States information systems may be monitored to ensure that they are operating correctly. Furthermore, the content of emails and other data on these systems may be examined, in exceptional circumstances, for the purpose of investigating or detecting any unauthorised use. This email has been scanned for viruses by the States of Jersey email gateway.

Confidentiality and Privacy : The confidentiality of this e-mail and your reply cannot be guaranteed. As a public authority, the States of Jersey is subject to the provisions of the Freedom of Information (Jersey) Law 2011. Under this Law we may be required to disclose information we hold, including the contents of this email and any response to it, unless the information is protected from disclosure by an exemption under the Law or any other enactment, including the Data Protection (Jersey) Law 2018. We collect and process personal information about you under the Data Protection (Jersey) Law 2018. For more information on how we use your data please go to our privacy statement pages on www.gov.je.

From: [REDACTED]
To: [Jonathan Renouf](#)
Cc: [REDACTED]; [William Peggie](#)
Subject: RE: Query reOQ107
Date: 03 November 2022 20:43:55

Dear Minister

This would be good to put on the agenda on Monday so that we are all aligned, especially with the Scrutiny hearing coming up (Willie and [REDACTED] from Treasury will attend).

I have been trying to get to the bottom of this so I can plan going forward and provide security for staff. The GP bid shortfall in 2025 and 2026 will pay for salaries only with little left to do the work such as Wildlife Law and Air Quality. On the plus side, we are OK for 2023 and I have re-arranged the spend to cover extra PFAS work which was unforeseen,

Treasury have come back to me with the following;

The change was made based on a submission from the department, as part the process of revising bids to support COM's direct to fit into the financial envelope, albeit in this case there was an unforeseen consequence.

The department has secured additional base funding across all years in the Government Plan, which is supplemented by CEF monies in 2023 and 2024. The department will work with Treasury on the ongoing funding position from 2025 in future years' Government Plans, which could for example be the continuance of the CEF funding, new investment or reprioritisation of existing funds.

If there are short-term practical issues in terms of committing to spend I'm sure that a solution could be found (likely a letter of comfort to the AO), but we would need the department to set out what exactly is needed.

This does not sound conclusive and a letter of comfort is OK but mentions the short term. I will ask [REDACTED] to include it on the agenda on Monday.

[REDACTED]

From: [REDACTED]
To: [Jonathan Renouf](#)
Cc: [REDACTED]
Subject: FW: PFAS Catalyst for Disease
Date: 25 November 2022 11:21:52
Attachments: [PFAS THE CATALYST.pdf](#)

Dear Jonathan

Would you like to offer a response? I can check whether the Health Minister would also like to respond, if you would like.

Thank you

[REDACTED]

From: [REDACTED]
Sent: 25 November 2022 10:49
To: Jonathan Renouf <J.Renouf4@gov.je>
Subject: PFAS Catalyst for Disease

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear States Member

I hope you are keeping well and looking forward to Christmas.

The content of my report, as attached, is the truth; PFAS is now so prevalent on our island that it is an island wide concern for every individual that lives here, in particular, for children (Page 9).

Due to decades of island wide exposure to PFAS, this subject matter affects you, your family, your friends, your pets, every biological entity on our island. Collectively you have a duty of care to every islander to understand PFAS and what can be done to protect future generations of islanders.

With immediate affect the Government should prioritise water quality on our island to protect future generations from the chemical cocktail being served by Jersey Water. Public Health could be revolutionised by understanding the detriment PFAS has on health. Just as important is the long-term cost to the Government by not dealing with the social or economic impacts of the prevalence of PFAS. It is no coincidence that the health system in Jersey is failing, literally everyone is PFAS riddled and prone to disease.

If any of you are truly interested in protecting our island, please review legalities adopted by the Danish Government to significantly reduce exposure to PFAS within their environment. The Danes seem to be at the forefront of protecting their population. Jersey seems to be at the forefront of making their environment worse by allowing blending of PFAS chemicals into mains water, compounding all issues.

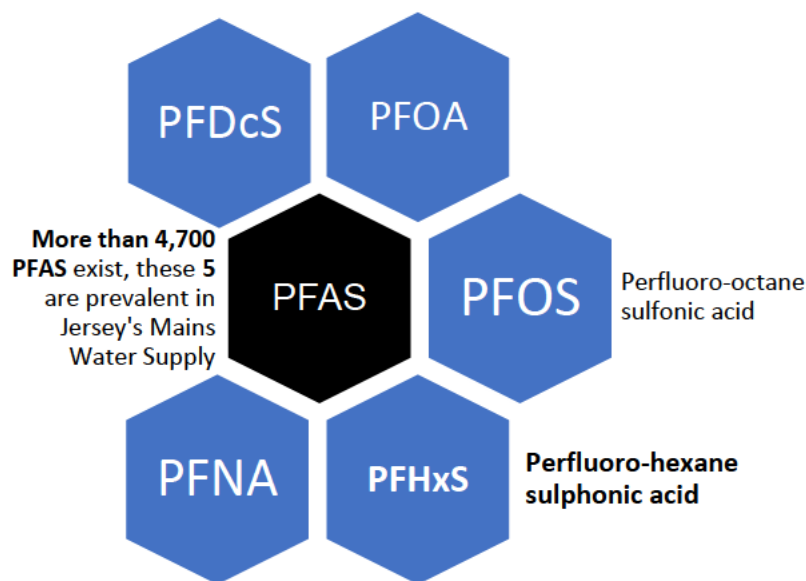
Please do not hesitate to contact me should you wish to discuss this subject matter further; I am more than happy to meet up to discuss.

Best wishes

[Redacted Signature]

PFAS

Catalyst for Disease



Throughout this report all values of PFAS levels are given in parts per trillion (ppt)

One ppt means that there is one part of a substance for every trillion parts of substance and air, water or soil containing it. Imagine the water contained in 20 Olympic size swimming pools, add one drop of dye; this is the equivalent of one ppt.

Written by [REDACTED] – Summer 2022

A resident of [REDACTED] Jersey, Channel Islands

Statement from the Author

To understand what PFAS are, what relevance they have to the islanders of Jersey and their environment, please read previously written reports, synopsis below:

The 2018 “Health Concern Report” highlights elevated levels of disease within a community, known by its government, to have ingested high levels of various PFAS.

“PFOS Harms Health”, written in 2020. The conclusion of this report outlines how the Government of Jersey and Civil Servants allowed the island of Jersey’s ground and public water supply to be exposed to PFAS chemicals as found in Airport Fire Fighting Foam. The report provides evidence that residents who unknowingly drank the contaminated groundwater show elevated levels of PFOS present in their blood, years after initial exposure.

“PFAS A Public Health Crisis”, written last year, proved that residents of Jersey, living in various Parishes, have significantly high levels of PFOS in their blood. If you are resident in the island of Jersey, the proof you, your family, your pets and everyone you know has been ingesting elevated levels of PFAS will be evident in blood. Blood being the biomarker for referencing PFAS ingestion.

PFAS are highly toxic chemicals because they form a bond to blood proteins in the human body. These manmade toxins should not exist inside living organisms; the subsequent result is that ingested PFAS are the catalyst for biological damage and the elevation of disease across the world today. From years of studying PFAS related doctrine, it is evident that PFAS affects every cell in the human body. It is vital to humanities health to avoid the continued creation and subsequent ingestion of PFAS chemicals.

My intention is to help people understand the detriment PFAS will have on their health, people that understand medical institutions are turning a blind eye to the cause of disease. Medical professionals try to treat your symptoms in a world where governing bodies do not protect you from the root cause. PFAS affects RNA, DNA and gene expression, as PFAS passes from mother to the unborn child, creating genetic flaws; whether accelerating existing historic gene defects or defects that are subsequently manifested from the chemical reactions caused by PFAS.

This report is to clarify that PFAS is a catalyst for diseases prevalent on the island of Jersey and to reassure those people who are sincerely concerned for how PFAS may have impacted their health, that there are measures that can be taken to reduce your PFAS levels.

Disclaimer: The author of this report does not dispense medical advice or endorse the use of any medical technique described as a form of treatment following PFAS exposure. The information provided throughout this report is to provide the reader with knowledge. The author assumes no responsibility for any individual’s interpretation or use of the information provided.

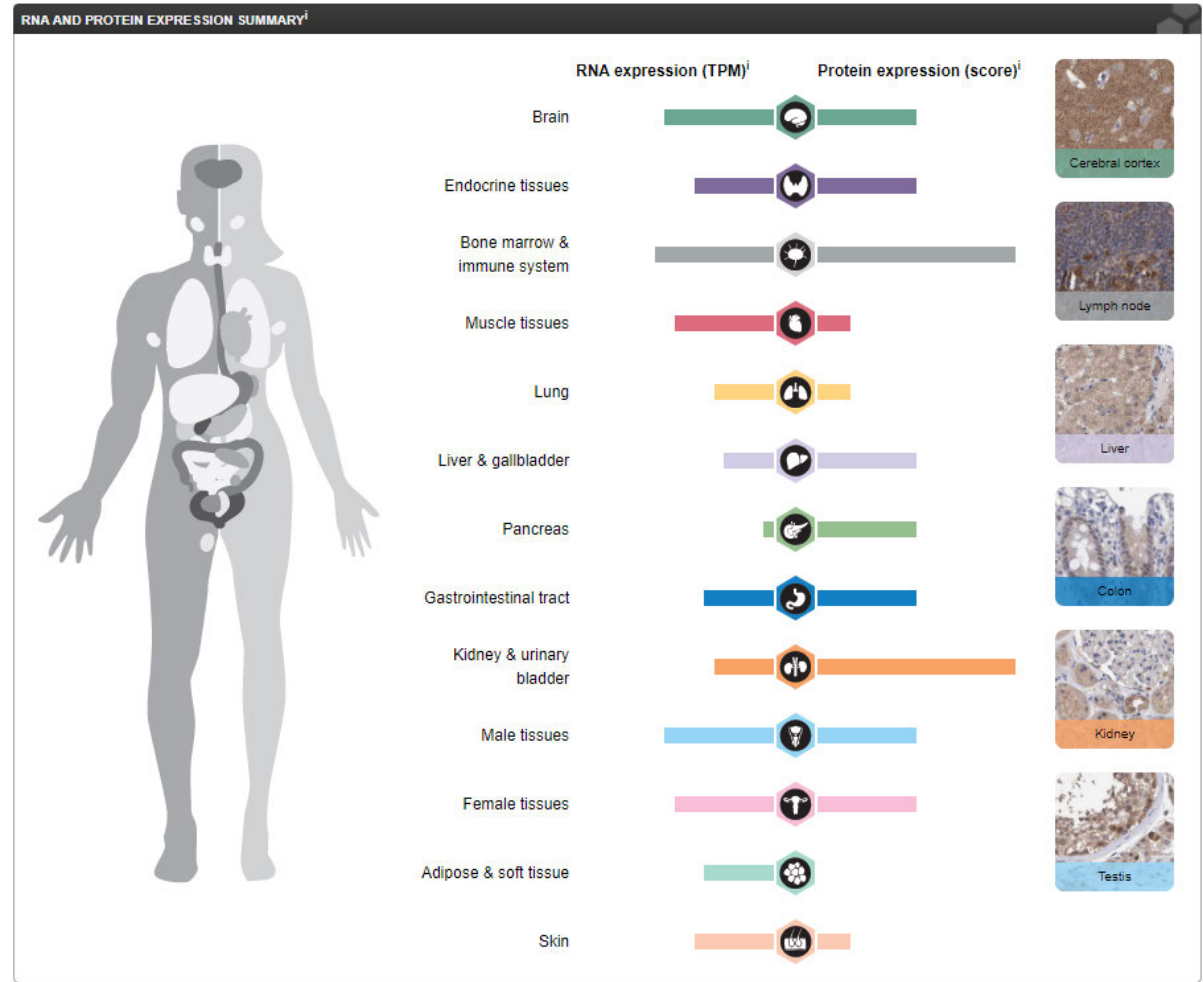
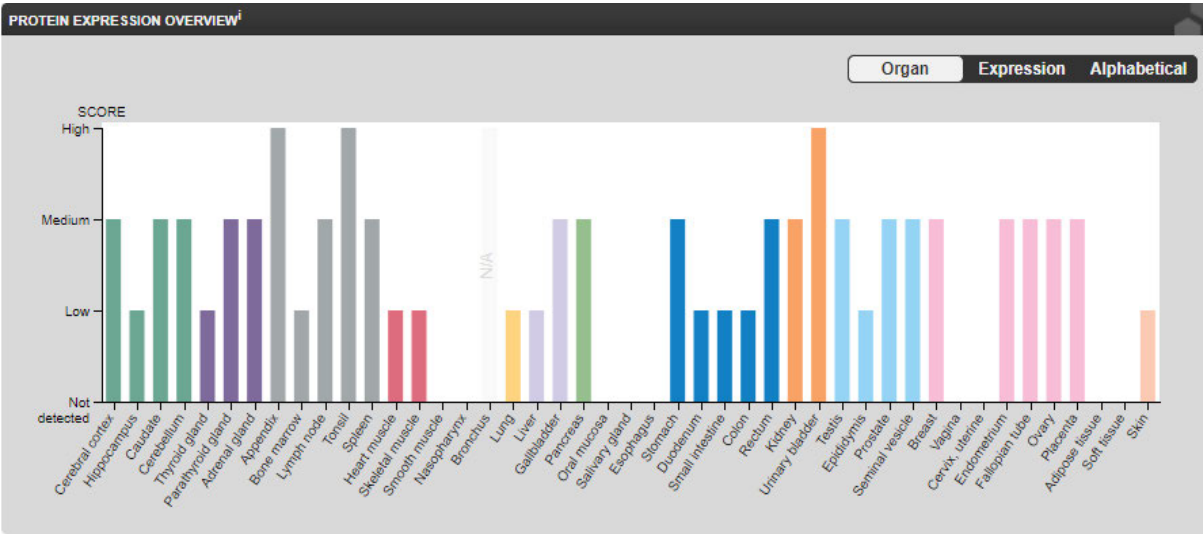
PFAS Bonds to Protein

<https://v17.proteinatlas.org/ENSG00000178921-PFAS/tissue>

This website is a comprehensive guide to the affect PFAS is having on human tissue at a cellular level. The pathology tab is extremely interesting, making me wonder if the doubling of cancer patients in Jersey during the last ten years is linked to PFAS ingestion from our ground and mains drinking water.

Proteins are the biological building blocks of life on earth, responsible in humans for an array of functions, including cell structure, DNA replication, RNA gene expression, catalyst for metabolic reaction, to write just a few. In other words, intact uncontaminated protein is vital for each individual human to be healthy. **PFAS is detected in the blood of humans and animals worldwide.**

These charts detail which organs within the human body have the highest protein expression. PFAS are manmade, they should not be part of human tissue. When PFAS are ingested, they bond to protein.



Think about this: How many people do you know have had emergency surgery due to appendicitis or have had their tonsils removed. Is this the first sign that PFAS toxins are causing organ damage? Why are medical professionals not being taught to check for PFAS levels in humans before treating a patient? Why is cancer not being tracked with levels of PFAS in the general population?

Microbiologist publicly concludes PFAS harm to human health

██████████ (en.wikipedia.org/wiki/██████████) is one of many scientists speaking out about the continued use of PFAS and the absolute devastation it is causing to life on earth. ██████████ made this speech in the USA senate in March 2019:

“PFAS affects multiple tissues in both males and females, of multiple species, at all developmental life stages,” ██████████ replied, summarizing the growing body of scientific literature. “It's not just cancer. It's not just effects on the immune system, it's not just effects, for example, on the kidney or the liver, it also has effects on development and reproduction, **and pretty much almost every system that you can think of.**”

One month after this speech, I had blood taken in California and analysed by Vista Analytical Lab to determine its PFAS levels: In my blood as of 08 February 2019

PFOA = 1,090ppt / PFOS = 8,810ppt / PFHxS = 5,050ppt

These PFAS figures in my blood can be put into context by making a comparison to the average citizen in America using this website: <https://www-pfas.pfas-exchange.org/report/graphtool/> Click on ‘What’s my exposure’ and enter your blood test results, the following are mine:

The level of PFOA in your blood is lower than most Americans
The level of PFOS in your blood is higher than 75% of Americans
The level of PFHxS in your blood is higher than 95% of Americans

By the age ██████████ and trying to work out why, I had a cause ██████████ made worse when washing in PFAS polluted water.

██████████ explained what had been happening to my health, my family’s health and my neighbours’ health over decades. PFAS doesn’t kill you quickly, it makes you defective, it is making all life on earth defective and prone to disease.

Knowledge of the devastating effects PFAS have on health

Published 07 December 2020: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7906952/>

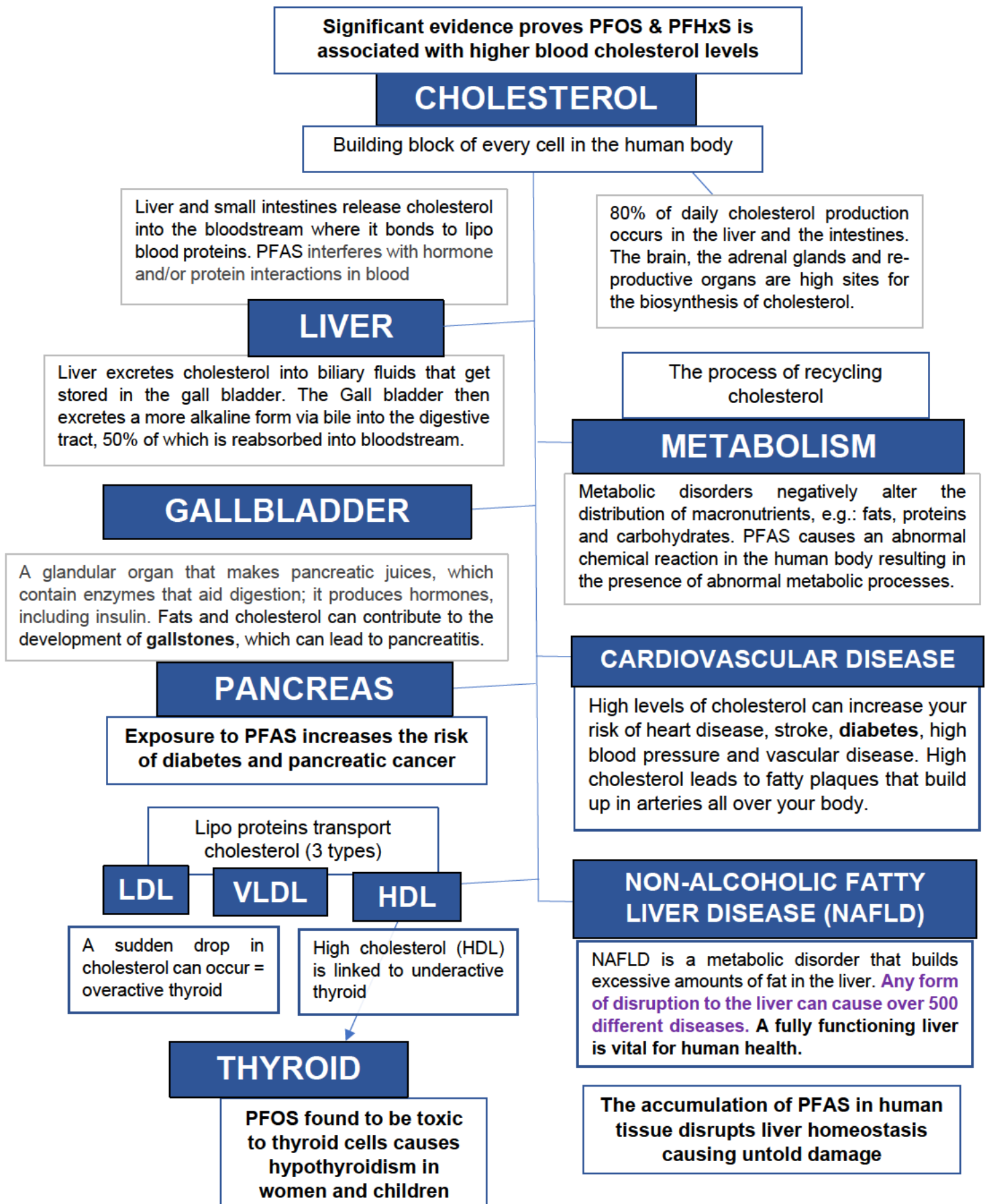
PFAS & CHOLESTEROL

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3575486/>

This Danish study of a low level exposed general population indicated small but significant associations between plasma PFOA and PFOS levels and total cholesterol in a middle-aged, general Danish population.

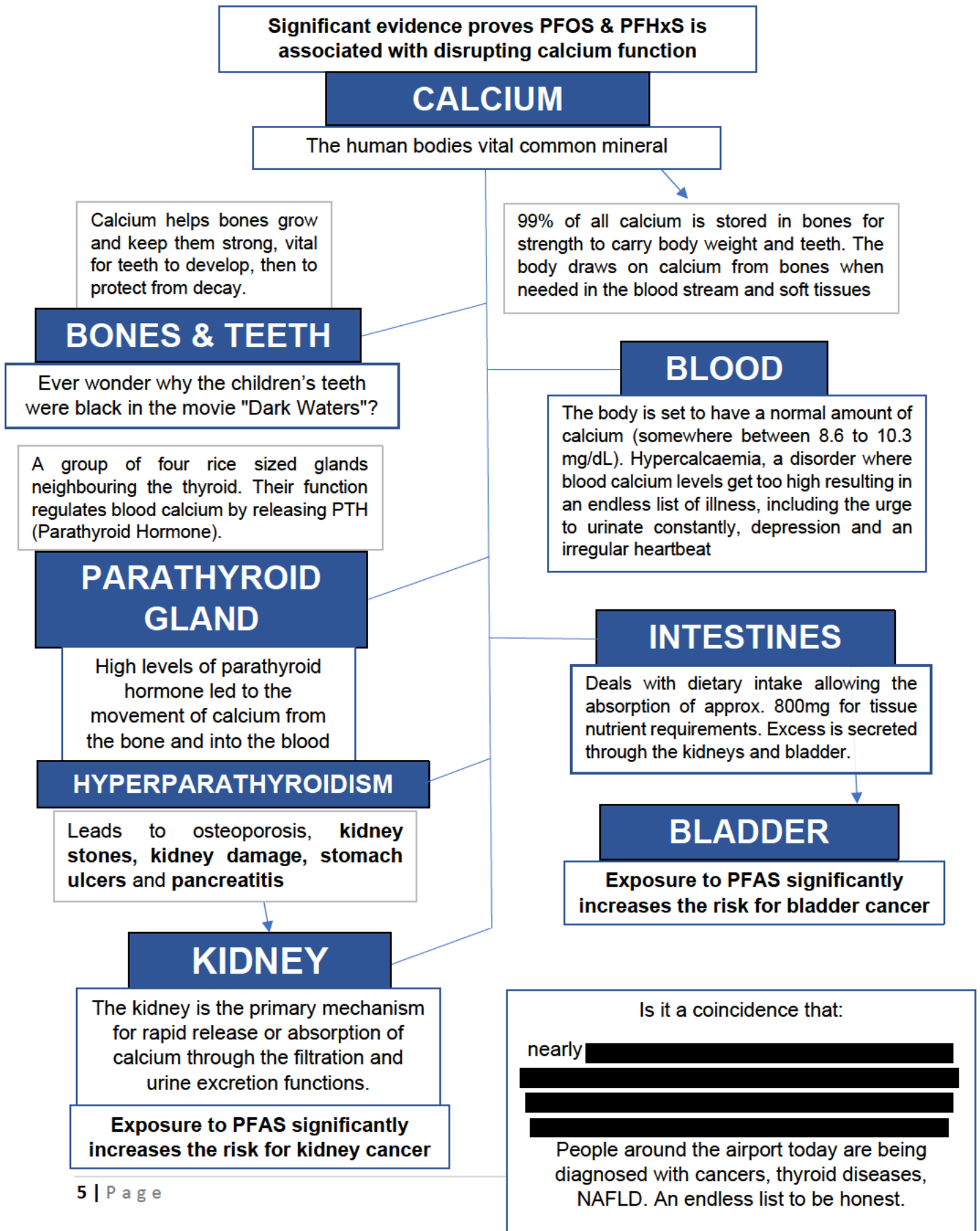
After ingestion, PFAS are absorbed from the gastrointestinal tract into the blood. There the substances bind non-specifically to serum proteins and are distributed to all organs by blood. The highest PFAS concentrations are found in organs such as the liver and kidneys as they are well supplied with blood. There are countless epidemiological studies on just how PFAS is affecting your health and in particular the elevation of cholesterol in the human body. This significant chemical reaction, in my opinion, is the catalyst for a plethora of diseases.

The diagram below explains the devastating effects that the elevation of cholesterol in the human body can cause. Epidemiological studies of PFAS conclude cholesterol elevation.



PFAS & CALCIUM

The diagram below explains the devastating effects that the dysregulation of calcium in the human body can cause. Epidemiological studies of PFAS conclude a positive association with disrupting serum calcium.



PFAS & DNA

The diagram below briefly explains the effects that PFAS has on DNA, essential for all known forms of life. Humans are becoming defective and all life around them.

DNA (Deoxyribonucleic acid) carries genetic instructions for development, functioning, growth and reproduction of all known organisms and many viruses.

DNA

PFAS ALTERS DNA METHYLATION

DNA Methylation regulates gene expression using proteins involved in gene repression; inhibits binding of transcription factors to DNA. A growing number of human diseases have been found to be associated with abnormal DNA methylation. **Neural injury and mental impairment are common side effects.**

THE UNBORN CHILD

PFAS passes from mother to child through the placenta and through breastfeeding indicating DNA Methylation before birth; the result is altered gene expression in children that affects health in later life.

[https://en.wikipedia.org/wiki/Per- and polyfluoroalkyl substances](https://en.wikipedia.org/wiki/Per- and_polyfluoroalkyl_substances)

Tracking the Health Impacts of C8 (PFAS) Exposure

<https://www.allegHENYfront.org/tracking-the-health-impacts-of-c8-exposure/>

“██████ a physician who oversaw the blood tests for thousands of Mid-Ohio Valley residents, said C8 (**PFOA & PFOS**) is unique because it attaches itself to blood proteins and travels through, and attacks, every organ in the body. According to ██████ it damages the thyroid in the endocrine system; harms the digestive system causing ulcerative colitis; impacts the reproductive system causing preeclampsia hypertension in women and testicular cancer in men; and attacks the urinary system causing kidney cancer.”

PFAS CAUSES AUTOIMMUNE DISORDERS

PFAS ingestion linked to increased sensitivity to traffic related air pollution

<https://pubmed.ncbi.nlm.nih.gov/33289704/>

Albumin (Blood protein) is the major carrier of PFAS
<https://www.sciencedirect.com/science/article/pii/S0160412019331964>

PFAS Exposure leads to Acceleration of Aging

I could continue to give countless examples of how PFAS affects the human body; all you need to know is PFAS are toxins like no other in that they bond to blood proteins resulting in devastating alterations to the normal function of almost every cell in the human body. Until they are removed from the environment, they are here to stay, forever.

It is all too late to prevent your exposure to PFAS here in Jersey. Government bodies have conducted themselves in such a manner as to continually mislead the public and downplay the utter devastation PFAS is causing our island. The continued environmental, social, and economic impacts play out today.

<https://www.gov.je/news/2018/pages/healthconditionsandmultimorbidity2018.aspx>

Is it a coincidence that the Jersey Quality Improvement Framework in 2018 listed the following 12 conditions as prevalent long term health conditions experienced by Jersey residents?

- Atrial fibrillation
- Asthma
- Coronary heart disease
- Chronic kidney disease
- Chronic obstructive pulmonary disease
- Dementia
- Diabetes
- Heart failure
- Hypertension
- Mental health problems (Depression)
- Obesity
- Stroke and transient ischemic attack

Kidney disfunction is directly linked to heart disfunction and high blood pressure

<https://www.verywellhealth.com/link-between-heart-and-kidney-disease-4128822>

PFAS elevates cholesterol, dysregulates calcium distribution, to name only two factors that cause untold damage to an individual's metabolic processes whilst constantly attacking liver and kidney function.

GOVERNMENT SUPPORTED BLOOD TEST RESULTS

After years of campaigning by St Ouens Bay residents, the Government of Jersey in 2022 agreed to test the blood of certain islanders for its PFAS content, on conditions they deemed relevant and without conducting an island wide control group for comparison. The results are truly shocking:

PFAS ppt	Parish	Age*	Sex	Disease
6,130	St Peter	58	F	NAFLD - Thyroid
6,880	St Peter	46	F	Asthmatic – Autoimmune Disorder – Thyroid - Skin
7,900	St Peter	41	F	Non Disclosure
8,900	St Peter	18	M	Acute Spinal Pain
9,000	St Peter	23	F	Gastrointestinal
9,600	St Peter	20	F	Non Disclosure
10,650	St Brelade	42	F	Thyroid
10,700	St Peter	49	F	Thyroid – Gastrointestinal - Skin
10,800	St Peter	48	F	Thyroid - Cholecystectomy – Autoimmune Disorder
12,900	St Peter	24	F	Thyroid
13,100	St Peter	56	M	Multiple Myeloma Cancer – Spinal Osteoporosis
14,040	St Peter	36	M	Born with shadow on lung - Asthmatic
14,800	St Peter	38	M	Asthmatic
15,600	St Peter	43	M	Appendectomy - Ulcerative Colitis – Cancer Essential Thrombocythemia
15,770	St Peter	59	F	Cholecystectomy – Heart Arrhythmia - Autoimmune
15,950	St Peter	72	F	Shoulder replacement - Terminal Cancer
16,220	St Peter	82	M	Prostate, Kidney & Bladder Cancer
16,400	St Ouen	47	F	Autoimmune Disorder
17,830	St Peter	36	F	Asthmatic
20,970	St Peter	53	M	Spinal Reconstructive Surgery
21,320	St Peter	81	M	Heart Arrhythmia

PFAS ppt	Parish	Age*	Sex	Disease
22,390	St Peter	63	M	Shoulder replacement
23,910	St Peter	63	M	Tonsillectomy - Appendectomy - Diabetes Type II
25,720	St Brelade	45	F	Degenerative Disc Disease – Non-Disclosure
26,020	St Peter	31	M	Asthmatic
26,100	St Peter	69	M	Cholecystectomy – Pancreatitis – Autoimmune
27,690	St Peter	69	F	Autoimmune Disorder – Skin Disorder
27,980	St Peter	74	M	Autoimmune Disorder
28,890	St Peter	50	F	Autoimmune Disorder
29,370	St Peter	49	F	Kidney Stones / Thyroid
30,450	St Peter	79	M	Sarcoidosis – Kidney Stones - Bladder
31,060	St Peter	44	F	Tonsillectomy - Uterine Cancer – Autoimmune
33,850	St Peter	73	F	Thyroid – Gastrointestinal – Blood
36,930	St Peter	73	M	Kidney Stones – Heart Arrhythmia corrective Surgery
37,510	St Brelade	75	M	Cancer
37,830	St Peter	71	M	Kidney Stones – Heart Arrhythmia corrective Surgery
38,450	St Brelade	76	M	High Cholesterol – Spinal Surgery
43,630	St Peter	50	M	Kidney Stones – Spinal Surgery - NAFLD
44,700	St Peter	69	M	Autoimmune Disorder
45,110	St Peter	70	F	Kidney - Ureteral Stent – Knee replacements
45,210	St Peter	49	M	Kidney Stones – Spinal reconstructive surgery
46,330	St Peter	80	F	Skin Cancer – Parkinson's – Diabetic Type II
46,730	St Peter	60	F	Gastrointestinal
48,640	St Peter	24	F	Thyroid – Gastrointestinal
53,900	St Peter	66	F	Cancer
62,700	St Peter	55	F	Thyroidectomy
66,940	St Peter	78	M	Prostate Cancer – Gallstones – Liver - Kidney
68,130	St Peter	55	F	Thyroid – Skin – High Blood Pressure
72,600	St Peter	79	F	Blood – Bladder - Skin
99,040	St Peter	60	M	Thyroid
106,770	St Peter	76	F	Non-Disclosure
125,150	St Peter	85	M	Transmetatarsal amputation – Kidney Stones
125,810	St Peter	54	F	NAFLD – Thyroidectomy
154,900	St Peter	86	F	Cerebrovascular accident (stroke)
305,640	St Peter	41	F	Non Disclosure
414,920	St Peter	69	M	Diabetes Type II – Cholecystectomy
1,535,540	St Peter	64	M	Non Disclosure

ppt Figure shown in parts per trillion is the total amount of PFAS showing in a person's blood

Parish Parish where the islander lived; this was a condition of eligibility for testing.

Age* Islanders age at the date of their blood test

Sex Male / Female – relevant as PFAS effects the sexes differently

Disease: All diseases listed can be proven through individual patient medical records. In some cases, there are a vast array of symptoms, those listed are the severest symptoms or anatomy affected. Non-Disclosure is reported where patients have requested their medical records remain private.

* Age is the patients age at the date of their blood test. Age is a variant that must be considered in the subject as it denotes the long-term ingestion of PFAS. Half-lives are how long it takes the body to excrete half of a toxic substance assuming no further intake. However, in Jersey the continued presence of high levels of PFAS in drinking water results in levels in the body continuing to rise over long periods of time. With no further ingestion after 1 half-life the amount remaining is 50%, after 2 half-lives 25% remains etc, but with continued ingestion the levels continue to rise indefinitely only reaching 95% of the maximum after 5 half-lives have passed. Whilst half-lives for PFAS in animals is measured in weeks, for humans it is typically multiple years extending to more than a decade in the case of PFHxS.*

PFHxS - Perfluoro-Hexane Sulphonic Acid

Facts Check: https://pfasl.itrcweb.org/fact_sheets_page/PFAS_Fact_Sheet_AFFF_April2020.pdf

“Airport Fire Fighting Foam, as used by Jersey Airport, contained PFOS and various precursors that could potentially break down in the environment to shorter chain PFAS such as **PFHxS**”.

Facts Check: <https://www.hillandponton.com/fire-fighting-foamdeadly-in-the-end/>

[The Dangers of Fire Fighting Foam Explained! - Hill & Ponton, P.A. \(hillandponton.com\)](https://www.hillandponton.com/fire-fighting-foamdeadly-in-the-end/)

My research leads me to believe that PFHxS is fast becoming an issue for islander's health. PFHxS has a far longer half-life in the human body and accumulates at a faster rate. Results I have reviewed from recent government approved testing proves as such.

On the [REDACTED]. The results are startling:

PFHxS ppt	PFOS ppt	Parish	Age	Sex	Disease
36,280	3,000	St Lawrence	[REDACTED]	F	Chronic gastrointestinal issues

This is the result from a [REDACTED] that was [REDACTED] this is [REDACTED] PFOS test result as of 26 June 2020:

PFHxS ppt	PFOS ppt	Parish	Age	Sex	Disease
unknown	4,400	St Lawrence	[REDACTED]	F	Autoimmune Diseases

The Government refused to test this family as they didn't meet the conditions deemed relevant.

The European Food Safety Authority (EFSA) state:

“Human biomonitoring in Europe According to EFSA (2020a), the trends over time in some HBM studies in Europe show that the concentrations of PFOS and PFOA in human blood serum and plasma have decreased significantly after the year 2000. For PFNA, perfluorodecanoic acid (PFDA) and perfluoroundecanoic acid (PFUnDA), the EFSA (2020a) indicates increasing or constant concentrations in many studies in Europe since 2000, **while different trends have been reported for PFHxS**.

PFOS & PFHxS in human blood serum in the islanders of Jersey is increasing because PFAS has been left to continually permeate our island's drinking water.

It is probable your children are in danger of ignorant politicians, civil servants and our Water Company that knowingly allow the blending of PFAS into mains drinking water. Surely children should be protected from PFAS at all costs.

The following is an extract from the American Academy of Pediatrics – published on 13 September 2022. Local paediatricians should be made aware and have access to such information.

<https://publications.aap.org/aapnews/news/22138?autologincheck=redirected?nfToken=00000000-0000-0000-0000-000000000000>

“Key recommendations for paediatric health care providers.

For those tested, use the sum of seven PFAS compounds to inform clinical care:

- <2,000ppt: PFAS-related adverse effects not expected; provide usual standard of care;
- 2,000 to 20,000ppt: potential for PFAS-related adverse effects (especially in sensitive groups); encourage exposure reduction strategies, provide usual standard of care with prioritization of dyslipidaemia

(Dyslipidaemia: Abnormally high levels of lipids (fats) in the blood. Usually with no symptoms but can lead to cardiovascular diseases. Dyslipidaemia occurs when someone has abnormal levels of lipids in their blood. While the term describes a wide range of conditions, the most common forms of dyslipidaemia involve high levels of low-density lipoproteins (LDL), or bad cholesterol low levels of high-density lipoproteins (HDL), or good cholesterol);

- $\geq 20,000$ ppt: increased risk of adverse effects; encourage exposure reduction strategies, provide usual standard of care with prioritization of dyslipidaemia screening per AAP recommendations, conduct thyroid function testing (with TSH) at well visits for patients over 18 years and assess for signs and symptoms of testicular cancer and ulcerative colitis for those over 15 years.”

There is a wealth of knowledge and guidance available; it is up to our Minister for Health & Social Services to understand the issues and the Public Health Department to conduct adequate research that safeguards your children from disease.

All biological matter in Jersey today is ingesting above ubiquitous amounts of PFAS. I have written the following from knowledge I have gained whilst studying PFAS. A self-help guide to protecting you and your family. Everyone deserves a healthy future. These steps should be considered as part of an exposure reduction strategy to help those that are aware of PFAS:

STEP 1 - AWARENESS

Awareness of how you are being exposed to PFAS chemicals is key to effectively lowering your risk of continued ingestion. Consider where your PFAS exposure is coming from. PFAS are bio accumulative and lowering your intake is vital to your long-term health.

➤ BOREHOLE WATER

Wherever you are living on the island of Jersey, if you drink borehole water it should be tested for PFAS chemicals. Here is how:

Confirmation from Environmental Health Department: “In relation to how islanders can have their borehole water tested for PFAS, Jersey Water are the correct department to contact. [Jersey Water.je - Providing the water for Island life](https://jerseywater.je)”

Jersey Water will charge you for testing:

- 17 PFAS compounds - [REDACTED] (ex. GST)
- 47 PFAS compounds - [REDACTED] (ex. GST)
- Courier Charge - [REDACTED] Jersey Water send samples weekly, unlikely separate charge

Here is why:

TOTAL SUM OF 21 PFAS CONCENTRATION = 174.93ppt

This is the result of borehole water taken and tested this summer 2022 from a residence in St Peters [REDACTED]. From the residence in question, [REDACTED] the house has had [REDACTED] and survived, the [REDACTED] of the house [REDACTED] on the [REDACTED] [REDACTED] succumbed to [REDACTED], even their [REDACTED] last year developed [REDACTED] [REDACTED]. Is it a coincidence that after drinking PFAS polluted borehole water for decades, this level of disease occurred? Diseases that can clearly be linked to PFAS ingestion.

There is no requirement for the Environmental Health Department to protect the public from PFAS chemicals in their private drinking water supply. Jersey Water do not tell Environmental Health unless specifically asked to do so by the landowner.

➤ MAINS WATER

There is no legal limit for PFAS in Jersey mains water; Jersey authorities informally follow UK guidance when considering whether water is safe to drink or not. In March 2020 the UK Drinking Water Inspectorate amended previous limits for water to be potable, from 1,000ppt for PFOS and 5,000ppt for PFOA (no limits for any other PFAS) to 100ppt for any one PFAS and 500ppt for the sum of all other detectible PFAS.

The following statement puts perspective on our governments elected limits:

“On 15 June 2022, the US Environmental Protection Agency [tightened its lifetime health advisory levels](#) for two PFAS that are globally widespread contaminants in drinking water, (PFOA) & (PFOS). **For PFOA, the recommendation is 0.004 part per trillion (ppt)** and for **PFOS, 0.02 ppt**. These levels are dramatically more stringent than [the 70 ppt that the EPA recommended in 2016](#) for the two compounds.”

Governing bodies across the world are continually reducing acceptable PFAS levels allowed in drinking water.

Mains water as provided by Jersey Water is not safe to drink using the US EPA's recommended lifetime exposure.

Here is why:

TOTAL SUM OF 8 PFAS CONCENTRATION = 46.1ppt

This is the result of **mains tap water** taken and tested for PFAS in 2021 by Environmental Health from a [REDACTED], where the [REDACTED] house couldn't work out how [REDACTED] had developed [REDACTED]. Coincidence? PFOS alone was 12ppt, the US EPA's lifetime exposure now sets lifetime exposure for PFOS as 0.02ppt.

Extract from Jersey Water website:

“PFASs are man-made chemicals not naturally found in the environment. PFASs (poly and perfluoroalkyl substances, which include PFOS and PFOA) are a group of more than 4,000 different chemicals that are found everywhere in our homes and everyday products. **No issues** have been identified with the public water supply in Jersey relating to PFAS.”

This is simply not true: issues have been identified by many islanders to the environmental health dept, Jersey Water and many others holding positions of trust. Jersey Waters own website confirms that the water is monitored for PFAS: <https://www.jerseywater.je/pfas/>

“Because of our sampling and testing, we can be sure that the mains water supply in Jersey is fully compliant, and by a significant margin, with these strict international limits. **Trace levels do exist in mains water**, and we will continue to report on these and minimise them **by blending** our various water sources and with our treatment processes;”

Jersey Water are within current legal parameters regarding PFAS allowed in mains water therefore this company can tell you their water is safe to drink. Jersey Water continue to blend water highly polluted with PFAS into their reservoir thereby increasing the waters PFAS content. The choice to believe Jersey Water if their water is safe to drink is yours.

My Advice: Your mains water contains PFAS as confirmed by Jersey Water. You can reduce exposure by using an alternative or treated water source for drinking, food preparation, cooking, brushing teeth, and any activity that might result in ingestion of contaminated water.

➤ DIETARY EXPOSURE

Please read this report dated 28 June 2021 entitled “PFAS in food: BfR (The German Federal Institute for Risk Assessment) confirming food is critically exposed to industrial chemicals.

[PFAS in food found in Germany: BfR confirms critical exposure to industrial chemicals - BfR Opinion No 020/2021 issued 28 June, 2021 \(bund.de\)](#)

Important messages to remember from this report:

- PFHxS & PFNA: Its salts and related compounds were identified as substances of very high concern.
- PFOS, PFOA, PFNA and PFHxS are excreted extremely slowly in humans after being absorbed into the body, which leads to accumulation in the human body.
- The present estimate of external exposure relates only to food (except for drinking water). The opinion sets a group tolerable weekly intake limit of 4.4 ng/kg body weight for four PFAS substances found currently to contribute most to the levels observed in human serum. These include perfluorooctanoic acid (PFOA); (PFNA); (PFHxS); and (PFOS). *(This limit would be reached by an adult using drinking water contaminated by 4ppt of total PFAS and less than half this for a child.)*
- The main groups "Meat and meat products", "Eggs and egg products" and "Fish and fish products" show the highest PFAS concentrations.

Like many environmental contaminants, PFAS accumulate along the food chain via paths such as soil, plants, animal feeds and water. This contributes to consumer exposure, especially through the consumption of food of animal origin. It doesn't stop there though; our healthier food is also being contaminated.

Accumulation of perfluorinated alkyl substances (PFAS) in agricultural plants: A review - PubMed (nih.gov) - <https://pubmed.ncbi.nlm.nih.gov/30502744/>

Important messages to remember from this report:

- Low accumulations of (PFOA) and (PFOS) have been found in **peeled potatoes** (*Jersey Royals are rarely peeled*) and cereal seeds
- Short-chain compounds (PFHxS) and (PFNA) can accumulate at high levels in leafy vegetables and fruits.
- Significant variations in PFAS build up in plants according to soil amendment are also found, suggesting a particular interaction with soil organic matter. Here, we identify a series of challenges that PFASs pose to the development of a safe agriculture for future generations.

In Oct 2021, I checked with Red Tractor, the organisation here in Jersey that issues certified standards to farmers locally, whether produce was tested for its PFAS content. Red Tractor replied, “get in touch with the Food Standards Agency ([Homepage | Food Standards Agency](#)) to report concerns about PFAS levels in food.” and “We include specific testing requirements where there are broadly applicable risks, accredited testing methods and clear parameters. This includes testing for pesticide residues and microbiological testing of water used in crop production. Accredited testing options and established upper limits for PFAS in food are limited, so there is no proscribed testing requirement at present.”

I checked with the Food Standards Agency and sent my report entitled ‘PFAS A Public Health Crisis’ to their helpline. I received this response: “There are currently no regulatory limits in place for levels of PFAS in foods. However, where regulatory limits are not established for certain foods, this does not mean that any level is permitted. Under [Article 14 of Retained EU Law 178/2002](#), it remains the responsibility of the food business operator to ensure food placed on the market is safe.”

In my report entitled “PFAS A Public Health Crisis”, pages 5 & 6 explain how PFAS is moving around our island. PFAS contaminated sludge from Bellozanne is distributed to farmers as ‘organic compost’ or ‘Natural Biosolids’ This toxic sludge is used on fields across our island.

Governing bodies in Jersey and England do not yet protect you from food products containing PFAS. Equally PFAS food packaging has yet to be banned.

My Advice / Opinion: Reduce your PFAS consumption. PFAS concentrations are far higher in meat (particularly beef), fish, dairy and cereal products. Any form of animal organ is a definitive do not eat (nearly all processed meats contain animal organs). Vegans aren't living longer because they don't eat meat, they are living longer because they eat far less toxins like PFAS saturated animal blood and organ proteins. It is your choice what you eat, if you want to lower your exposure to PFAS chemicals then you need to know where your food is coming from.

➤ PRODUCT EXPOSURE

PFAS is everywhere, cosmetics, shampoos, clothes, carpets; too many to list. Today PFAS continues to be manufactured without much thought to consequence.

My Advice: Do your research. This is one of many helpful websites: <https://pfascentral.org/pfas-free-products/>

STEP 2 – PERSONAL CONCERN

A blood test can analyse for a suite of PFAS compounds. It will be a snapshot in time of levels present in blood serum, thus a biomarker measurement of PFAS in a person's body. A blood test is the only way to determine how exposed you have been.

Lowering your PFAS levels, lowers your risk of developing diseases linked to PFAS ingestion.

On receipt of your results you can use this website to compare your levels to the average citizen in America: <https://www-pfas.pfas-exchange.org/report/graphtool/> Click on 'What's my exposure' and enter your blood test results.

I have been studying PFAS and health for years. I have seen first-hand the utter devastation it has caused to the Val De La Mare residents. About two years ago I decided to study anatomy, toxin removal processes and continually look at methods being utilised across the world to assist those having suffered elevated ingestion of PFAS.

The main form of clinical treatment is to remove blood/plasma from a person; this type of significant drop is a psychological win for those involved in having been poisoned by PFAS. The following is an example of how PFAS has affected the South Australian Metropolitan Fire Service and how they dealt with the issue:

Please watch this youtube video: <https://www.youtube.com/watch?v=xVLFKxFyFN0>

With treatment a firefighter during a six-month period dropped his PFOS level from 6,000ppt to 390ppt & his PFHxS from 2,500ppt to 950ppt.

https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Foreign_Affairs_Defence_and_Trade/PFASRemediation/Report/section?id=committees%2freportjnt%2f024880%2f79006

Results of the study

"This was compared to the blood donation group, which experienced a reduction in PFOS levels of approximately 10 per cent, and stable PFHxS levels. The plasma donation group saw 'a much greater drop in the PFOS levels of about 30 per cent' and a similar 30 per cent reduction of PFHxS levels"

<https://www.healthyandnaturalworld.com/reduce-your-risk-of-heart-attack-and-stroke-bydonating-blood/> - Something to think about: It is believed by many medical experts that regular blood donation can cut a person's risk of heart attacks and strokes by up to 80%.

Conclusion

Water, the elixir of life on planet earth; and here is humanity collectively destroying its unique pure qualities by polluting it with toxins. PFAS toxins being unique in that they bond to protein. Every global governing institution instrumental in protecting life on earth is neglecting the seriousness of PFAS manufacture, for all life on earth today is being affected by PFAS toxins. The impact of this manmade poison has permeated the natural world potentially creating an apocalyptic type of tragedy, in that it is negatively altering DNA, essential for all known forms of life. I wonder if the evolution of DNA sequencing will cater for these manmade PFAS chemicals, time will tell.

An associate pointed out to me that each human is responsible for their own health. I admire persons who challenge my logic, it helps me consider other people's thought processes. My simple answer is that I disagree. PFAS cannot be seen by the naked eye, it cannot be tasted, it is unknowingly ingested and the responsibility to protect the health of children, animals, and the environment we live in, does not just lie with Governmental Departments, not just manufacturers, not just organisations that provide consumables, or an endless list of protection agencies. Every adult alive today capable of understanding this report has a duty of care to each other. In this case, one cannot therefore be responsible for their own health unless they care enough to fight to improve the health and environment of those around them. When you truly understand the devastation PFAS is causing life on earth, you pick up the mantle and try to enlighten every person around you.

I believe that to be healthy in today's world you need as little PFAS in your body as possible. It is no longer survival of the fittest for we are all PFAS exposed and prone to disease, it is survival of the smartest. The smartest realise that it is vital to your health not to ingest PFAS, to lower the volume of PFAS in your system and to know what the PFAS in your system is doing or has done. On ingesting PFAS it bonds to blood proteins in your body causing a catalyst for disease. Increased ingestion of PFAS increases the risk of advanced mortality. I understand there are a multitude of variables for disease, but if I had the choice, I would take my chances with all those multitudes over having unknowingly ingested PFAS for decades.

The Government of Jersey's PFAS Technical Officers Group, Jersey Water and the Infrastructure, Housing & Environment Department repudiate positive steps to protect islanders from exposure to PFAS; blatantly continuing to proffer incorrect advice, blending PFAS toxins into water supplies, whilst undertaking yet another hydrological study for the forever chemicals they know are there thus delaying any form of positive remediation. The PFAS public health crisis that I know exists is being completely ignored, resulting in a social and economic disaster for the island of Jersey.

Now it isn't all doom and gloom because humans by their virtue are innovative, scientists today have made progress in destroying and breaking down PFAS molecules using sodium hydroxide, potentially helping to resolve this global human threat. Perhaps the 'Earth Bio Genome Project' will delve into the science of just how to unbind PFAS from protein using preprogramed DNA. Intense scientific research to protect you from PFAS is decades away from being implemented, therefore, life on earth continues to be threatened by PFAS exposure. We should all endeavour to love life on earth and each other, for whatever else could possibly be the point.

THE FATE OF HUMANITIES LONG TERM HEALTH & ALL OTHER LIFE ON EARTH LIES IN THE ERADICATION OF PFAS FROM OUR ENVIRONMENT

Scientists say PFAS chemicals could be responsible for drop in Phillip Island seal numbers - <https://www.abc.net.au/news/2021-05-14/pfas-found-in-phillip-island-seals/100136436>

This is just one species – now add every species on earth to the list!

THE MANUFACTURE OF PFAS SHOULD BE BANNED IMMEDIATELY

Our Government should most importantly be mitigating risk, they should:

- 1) Recognise the severity of PFAS poisoning to the environment and those that live in it. Medics are treating symptoms because the root cause of health problems is being ignored.
- 2) Set up an **Independent Public Enquiry** to include an independent Environment Regulator to assess PFAS deposits left in situ with a view to the provision of practical solutions. Insist the treatment of water eradicate PFAS chemicals thus preventing ongoing elevated consumption.
- 3) Consideration of a water plant that significantly lowers PFAS chemicals. It can be done: <https://haldonindustries.com.au/project/pfas-water-treatment-plant/> "The discharge criteria for the system required **total PFAS removal down to <0.0002µg/L.**" This point is vital as the intention now is to recycle wastewater here in Jersey.
- 4) Healthcare could be revolutionised if medics considered levels of PFAS in a patient's blood. Blood tests should be afforded to all islanders concerned for their health, provide them with counselling, blood/plasma donation and responsible advice. Provide ongoing medical screening for diseases known to be caused by PFAS poisoning. Ensure all medics locally are aware and trained accordingly.

Some Considerations for you:

Cholecystectomy (Gallbladder Removals)

Facts check: [Gallbladder Removal Effects on Cholesterol \(healthfully.com\)](http://healthfully.com)

Cholesterol contributes to the need for gallbladder removal, but the removal of your gallbladder does not significantly affect your cholesterol level. Is that because the PFAS in a person's system keeps elevating cholesterol?

March 2021 Freedom of Information Request From 1980 to date (if possible), please confirm the number of cholecystectomy operations performed annually for residents of Jersey. (To include operations to Jersey residents completed abroad, if known).

Response

The table below shows the number of cholecystectomy operations performed at Jersey General Hospital each year since 2012. It is not possible to produce data from before this period as the data is not held in an accessible format. In order to fully answer this question, it is estimated that it would take longer than the time permitted under the Freedom of Information (Costs) (Jersey) Regulations 2014, therefore Article 16 of the Freedom of Information (Jersey) Law 2011 has been applied. Data extracted for cholecystectomies are those coded to OPCS category J18 (J18.1 – J18.9) Procedures are only coded in the facility where they were carried out, so no Clinical Coding data will be available locally for anyone whose procedure took place off island.

<u>YEAR</u>	<u>TOTAL</u>
2012	123
2013	157
2014	124
2015	125
2016	154
2017	124

2018	115
2019	119
2020	88

Data Source: Jersey General Hospital Patient Administration System

Opinion: Gallbladder removals are unnecessary when patients can pass gall stones naturally. Not sure what a cholecystectomy costs the Government but economically and socially there are definite benefits to all involved with a simple liver flush. I wonder what number of patients are treated off island.

LIVER FLUSH - CHOLESTEROL & FAT REMOVAL

For me it wasn't simply how can PFAS be significantly reduced from the human body. I researched the long-term effects of PFAS ingestion and whether a person could combat the devastating affects already caused. My family and I have been consuming elevated amounts of PFAS for decades.

If your liver is defective, you will be susceptible to approximately 500 different diseases, its vital for your health to maintain a fully functioning liver. Thanks to [REDACTED] & [REDACTED], I came across the book "The Amazing Liver and Gallbladder Flush" by [REDACTED]. This book got my mind thinking overtime and I combined my knowledge of PFAS related epidemiological studies that relate to the increase of cholesterol and fat lipids with knowing that PFAS causes Non-Alcoholic Fatty Liver Disease. [REDACTED]

[REDACTED] liver flush produced:



The largest stone was 2cm in diameter



This parasite (unknown)



Countless small stones

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

I work on logic. The logical solution for avoiding gall bladder removal, decreasing chances of becoming diabetic or developing NAFLD or cancer, to name but a few of the 500 diseases that can be caused by a defective liver, is to liver flush. One is simply naturally and holistically cleaning one's vital internal organ, no pharmaceutical drugs with risks of side effects required.

KIDNEY FLUSH – CALCIUM REGULATION

For those not aware, if you have defective kidney function, you are more likely to die from a heart attack than from kidney disease. The kidney's principal role is to not just to clear waste from the body, they play a vital role in red blood cell production, regulating blood pressure and maintaining calcium balance in the body.

By removing all exposure to PFAS and elevating your intake of clean water, you will start to instantly flush your kidneys. There are countless remedies for kidney flushing.

Incidentally, I read a vast amount of literature on kidney health, including contacting several kidney organisations in America. Advice across the board is lower your animal protein load immediately. Entirely, no animal protein. It would appear this instantly improves glomerular filtration rate (GFR). Coincidence that the highest amounts of PFAS are in animal protein?

Beetroot Juice is known to remove calcium deposits from Kidneys.

Autoimmune diseases

Facts check: <https://www.cancercenter.com/community/blog/2018/10/the-cancer-and-autoimmune-disease-connection>

The class of chemicals PFAS (C8) is linked to autoimmune diseases. The American Autoimmune Related Diseases Association reports that there are **over 80** identified autoimmune diseases. In autoimmune diseases, the body attacks healthy cells and tissue, mistakenly thinking they are infections or unhealthy cells. Autoimmune diseases and disorders are diagnosed in high numbers, are increasing annually, and are now linked to certain cancers.

Research suggests an overall correlation between autoimmune diseases and cancer, in that having an autoimmune disease increases the risk of developing certain cancers.

July 2021 Freedom of Information Request It is my understanding that patients in Jersey that are diagnosed with an autoimmune disease are input into the EMIS database under a specific code. For each autoimmune disease there is a specific code.

A Could you please tell me how many auto immune disease codes are listed in the EMIS database that equate to a registered autoimmune disease with at least one person on the island having been diagnosed with that corresponding autoimmune disease.

B Are there any forms of autoimmune disease records kept by a Governmental Department?

Response

A The EMIS system information is held by GPs rather than by the Government. The Government of Jersey does not hold a central list of autoimmune diseases. It is estimated that to undertake a search or all possible codes within EMIS and conducting a data quality assessment would exceed the time limit of 12.5 hours provided under the Freedom of Information (Jersey) Law 2011. Article 16 has therefore been applied. Please also see the following link to a previous FOI request dated 29th April 2021. <https://www.gov.je/government/freedomofinformation/pages/foi.aspx?ReportID=4532>

B Information of autoimmune disease would be held on individual patients' records.

Opinion: [REDACTED] were told PFAS was in their drinking water. If you have an [REDACTED], you are vitamin D deficient and taking this simple vitamin daily really improved my health. Incidentally, not one medical professional has ever told me I might be vitamin D deficient or looked for the cause of my diagnosis.

Giving blood or being an organ donor

Facts Check: <https://pubmed.ncbi.nlm.nih.gov/31926037/>

Extract from above website: “**Conclusion:** A considerable percentage of blood donors had lead, PFOS and PFOA concentrations over the suggested limits.”

This is what I wrote on my last report: Our government refuse islanders’ blood tests: this is surely absurd when I have proven that elevated PFOS levels in Jersey Blood is cause for concern. If you were sick or had an accident and needed blood, would you want blood with elevated levels of PFOS in it from a donor?

Since my last report, certain islanders have been afforded a PFAS blood test, under imposed stipulations that I do not agree with as everyone should be afforded a PFAS blood test. I decided to register to be a blood donor to prove no one in government really cares about what is happening on our island regarding PFAS poisoning. I registered to be a blood donor; my bloods were sent for analysis. I was accepted and, on the 14 September 2022, I gave blood. I know this is unethical behaviour, for that I am sorry. I sent an email to the Head of Public Health asking that my blood be destroyed as it is toxic waste; he has confirmed this request was made.

Blood extracted locally is kept here in Jersey for use. Whether a blood transfusion for a cancer patient or a blood transfusion due to blood loss in an accident, it matters not. Measures to check blood donors for their PFAS level is purely one common sense approach to drastically improving health across our island. I ask you again, now that you know the truth, in the event of a blood transfusion, would you want blood with a higher or lower PFAS content?

For more information, please read:

<https://setac.onlinelibrary.wiley.com/doi/10.1002/etc.4890> Per- and Polyfluoroalkyl Substance Toxicity and Human Health Review: Current State of Knowledge and Strategies for Informing Future Research - Fenton - 2021 - Environmental Toxicology and Chemistry - Wiley Online Library - setac

<https://pubmed.ncbi.nlm.nih.gov/27939831/> Persistent alterations in immune cell populations and function from a single dose of perfluorononanoic acid (PFNA) in C57Bl/6 mice - PubMed

Characterization of the binding of per- and poly-fluorinated substances to proteins: A methodological review - ScienceDirect

<https://www.sciencedirect.com/science/article/abs/pii/S0165993619300755#:~:text=%20Per-%20and%20poly-fluorinated%20substances%20%28PFASs%29%20are%20known,biotransformation%20pathways%2C%20and%20the%20fate%20of%20selected%20PFASs>

Governments agree to eliminate the PFAS chemical PFHxS – June 2022

<https://cen.acs.org/environment/persistent-pollutants/Governments-agree-eliminate-PFAS-chemical/100/i23>

PFHxS elimination “is an important step towards banning more of these toxic ‘forever chemicals’ that pollute the environment and humans all over the world, threatening the health of millions of people,” [Sara Brosché, science advisor to the International Pollutants Elimination Network, says in a statement](#). “But the chemicals industry keeps replacing banned PFAS with different but equally harmful PFAS. That’s why there is an urgent need to ban all PFAS rather than addressing them one by one.”

From: [REDACTED]
To: [William Peggie](#); [Jonathan Renouf](#); [REDACTED]
Cc: [Kelly Whitehead](#)
Subject: RE: PFAS Brief
Date: 07 December 2022 09:57:54
Attachments: [image001.png](#)

Dear Minister

Annual average and max levels are as given below by Willie.

Recent September levels for VDLM pump was 0.022ug/l (micro grams) for total PFAS. Regulatory WHO/EU limits are 0.5ug/l so it is well below. The level has gone down due to the use desalination water during the drought that has no PFAS in it.

JW are also no longer using St Ouen well fields and Pont Marquet as a precaution. These go straight into VDLM- so levels are not expected to rise.

From: William Peggie [REDACTED]@gov.je>
Sent: 07 December 2022 09:50
To: Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED]@gov.je>
Cc: [REDACTED] [REDACTED]@gov.je>; Kelly Whitehead [REDACTED]@gov.je>
Subject: RE: PFAS Brief

Hi – I've taken this extract from [REDACTED] recent email - it refers to **treated water** generally and not that in vdml reservoir but gives the position that the treated water is below guideline concentrations.

I think you're right though – for up to the minute levels we would want to refer to JW.

Many thanks

W

In 2021 / 2022 regulatory year our maximum total PFAS concentrations in **any treated water** was 0.078 µg/l, with mean concentrations of 0.034 µg/l and 0.049µg/l from Augres and Handois works respectively. These concentrations are all **well below DWI, EU, Health Canada Regulations and draft WHO guidelines, for individual or total PFAS concentrations.** Whilst the aforementioned Regulations and Guidelines are not strictly comparable, broadly speaking they are set at 0.1µg/l for individual PFAS compounds and were specified, 0.5µg/l for total PFAS.

From: Jonathan Renouf <J.Renouf4@gov.je>
Sent: 07 December 2022 09:44
To: William Peggie [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Cc: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Kelly Whitehead <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: Re: PFAS Brief

This is helpful, thanks.

I guess the figure that would be most helpful is the current PFOS level in Val de la Mare relative to the WHO safe limit and the new EPA limit. But I think that is probably held by JW, and if we get into that much detail then I will say that I will get back to them.

Best

J

From: William Peggie [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Sent: 06 December 2022 18:00
To: Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Cc: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Kelly Whitehead [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: PFAS Brief

Hello Minister ,

A summary of activities / PFAS update follows and is in 2 parts – one more helpful than the other.....

1. The question of standards and limits is complicated by our not having a new water law in place, with a recent estimate of lodging being in 2024. This law will, among other things include regulatory limits for PFAS chemicals. Colleagues at Regulation will be taking this work forward but given heavy workloads I understand that this will be in 2024. Worth noting the distinction that our LRM (Tim's) team at Natural Environment, monitor and report and the Regulatory team ECP advise and regulate on water regs/limits so I'm not able to advise further on WHO guidelines and whether we are following them, a testing programme, quality thresholds currently being followed and why, until I hear back from colleagues. I've copied Kelly in to assist if possible in order that we can offer more information and in the event of failure will ensure I have a freshly ironed shirt to join you at Scrutiny.

2. In respect of Natural Environment's involvement in workstreams:

Hydrological Risk Assessment of the catchments as recommended in the 2019 and 2020 Technical Officer Group reports.

Hydrogeological & PFAS studies of two areas (St Ouen's Bay and upper Pont Marquet catchment) supported by incorporation of historic and additional data (being now required) to assess potential risks and inform remediation options.

The key project objectives are:

1. Further understand PFAS fate & behaviour and assess potential risks to human health and the environment;
2. Ensure safety and future security of public & private water supply.
3. Building public confidence through effective communication; and
4. Help identify pragmatic and sustainable risk management options.

Phase 1 of the project is complete with historic data being reviewed and data gaps identified. This will now be followed by 12 months of data collection from identified existing and new sampling sites. However, the data collection needs to be started at the same time across all sites and required the drilling of three boreholes. Permissions are currently being sought. Phase 2- clean up (not funded as yet)

Subsidised sampling

18 samples were taken, seven in the St Ouen's plume area and 11 outside. Sampling used the latest available science and an extended suite of 26 separate analyses. Important as little comparable data exists from elsewhere. Sampling procedures and protocols remain complex. Two households outside the plume exceeding UK Tier 3 levels, these have been resampled.

Island wide sampling.

40 boreholes and wells have been recently sampled across the island for 48 PFAS determinands. Results are expected before Christmas.

Ports investigation

Land Resource Management (LRM) are working with Ports to undertake a site investigation of Jersey Airport and anticipated clean-up of sources from historic activities. Phase 1 of the work is complete and Ports will now undertake a more detailed study of the groundwater to identify hotspots.

Budget RAG Actions

Phase 1 report has [REDACTED] worth of monitoring to be undertaken over the next year. Whilst this is within budget, the cost of drilling 4 boreholes is unclear and there will be other logistics to overcome to deliver that.

The above will necessitate movement of budget from 2022 funds into 2023/24. The appropriate paperwork has been completed and submitted to Treasury.

With regards and thanks for your patience

Willie

Willie Peggie
Group Director – Natural Environment

+44 (0)1534 [REDACTED]

Government of Jersey
Infrastructure, Housing and Environment
Howard Davis Farm
La Route de la Trinité
Trinity
Jersey JE3 5JP



**Infrastructure, Housing
and Environment**

From: [REDACTED]
To: [REDACTED]
Cc: [Kristina Moore](#); [Jonathan Renouf](#); [REDACTED]
Subject: RE: PFAS residents meeting
Date: 10 December 2022 08:46:30

Thank you [REDACTED]

This is fine with me and I will review anything from the environment side.

From: Kristina Moore <K.Moore2@gov.je>
Sent: 09 December 2022 18:54
To: Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Peter Bradley <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Tim du Feu <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: Re: PFAS residents meeting

Thank you [REDACTED] I'm also content with that approach.
Kind regards,
Kristina

From: Jonathan Renouf <J.Renouf4@gov.je>
Date: Friday, 9 December 2022 at 13:52
To: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>, Kristina Moore <K.Moore2@gov.je>, [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>, [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>, [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>, [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>, [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: Re: PFAS residents meeting

I am happy with that approach

From: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Sent: 09 December 2022 09:25
To: Kristina Moore <K.Moore2@gov.je>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: PFAS residents meeting

Good morning all,

I just wanted to follow up from yesterday's meeting. [REDACTED] advised that [REDACTED] would work on the minutes with and aim to have these ready for distribution by close of business today. Providing these have been shared with the residents in advance, I would suggest we prepare a press notice to send to the media on Monday and offer interviews with the Minister for Health & Social Services and Peter as previously discussed.

Providing you are all happy with this approach I will begin drafting the press notice to share with you. I know some of us captured photos during the meeting it may be helpful to send these to the media to accompany the press notice providing the residents aren't identifiable.

Best Regards,



Get [Outlook for iOS](#)

From: [William Peggie](#)
To: [Jonathan Renouf](#); [REDACTED]
Subject: Re: Guardian Pfas article
Date: 23 February 2023 09:08:17

Morning, many thanks. Will review .

W

Willie Peggie
Group Director - Natural Environment

From: Jonathan Renouf <J.Renouf4@gov.je>
Sent: Thursday, February 23, 2023 9:07:20 AM
To: [REDACTED]@gov.je>; William Peggie <[REDACTED]@gov.je>
Subject: Guardian Pfas article

Worth noting the G piece. May lead to local media/public interest. May need a quick response on our actions underway

Sent from [Outlook for iOS](#)

From: [REDACTED]
To: [REDACTED]; Kristina Moore [REDACTED]; Jonathan Renouf
Subject: RE: No snow but foam will that do
Date: 10 March 2023 14:13:50
Attachments: Image001.png

Dear [REDACTED]

We have previously sampled a similar report in St Ouen's Bay and confirmed by microscopic analysis that it is sea spume caused by the westerly gale.

We could sample for PFAS, but the sampling protocol would be extremely difficult. Coupled with the very small limits of detection and the fact that one would need an extremely large volume of foam to settle out over time to get a sample, means that the sampling process would be difficult and prone to cross contamination (the sampling protocols are very exact-for example, one cannot wear waterproofs, gloves etc whilst sampling). We tried to sample for PFAS when it was last reported, but I had very limited confidence in the results and they were difficult to interpret given the lack of a control sample of what is normal.

I would suggest that the best course of action is to collect a sample of foam look for diatoms (dead diatoms can produce the foam during gales) and compare this with a control sample from elsewhere. This will be done this afternoon with the analysis undertaken next week once the foam has settled.

The main work in the Bay of undertaking a hydrological risk assessment of the distribution of PFAS is progressing and the phase 1 report examining existing data and identifying future sampling will be loaded onto the new web site soon.

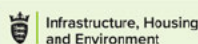
The video that you sent through suggests a similar scenario as before, of westerly gales and driving surf causing the spume. However, let's have a look and I will let you know once the analysis has been completed.

Thanks

[REDACTED]

Head of Land Re [REDACTED] nagement
Direct: +44 (0) [REDACTED]
Mobile: +44 (0) [REDACTED]

Government of Jersey
Howard Davis Farm | La Route de la Trinite | Trinity | Jersey | JE3 5JP



From: [REDACTED]
Sent: 10 March 2023 12:40
To: [REDACTED] Jonathan Renouf <J.Renouf4@gov.je>
Cc: [REDACTED] @gov.je; Kristina Moore <K.Moore2@gov.je>; Peter Bradley [REDACTED] @gov.je; [REDACTED] @gov.je
Subject: Re: No snow but foam will that do

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear Jonathan

I, like many am concerned with ever growing issues that are facing this bay and the whole island, with the pollution of PFAS.
Happy to educate you on this also.

Granted spume is a thing and does occur with water and in this bay more so as you point out with westerly winds, just like we know that polluted water goes out into the bay on a daily basis, we would be naive to think otherwise.

However as we all know about the pollution in this bay caused by various contaminants, I am not stating that it is solely PFAS, however the consistency and performance of this suggests that it is more than likely a factor, it would be of use to one to know what was in the contents of the spume/foam when it occurred, then we would be able to determine what effects were actually there.

Attached is a link with a very good diagram as to how PFAS enters our waters.

<https://www.publichealthmdc.com/environmental-health/environmental-hazards/pfas/pfas-in-madison-dane-county>

Also attached a guide on the difference of sea foam.

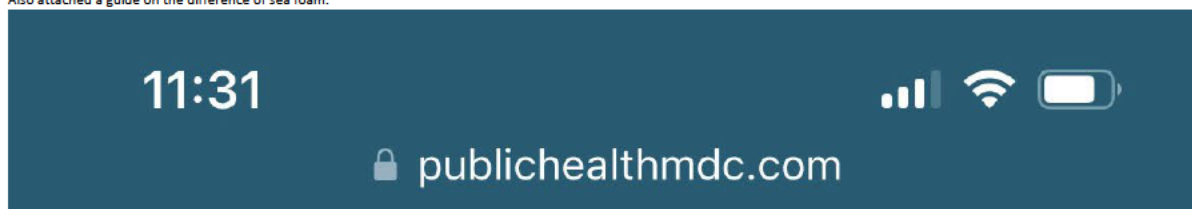




Photo Credit: Civil and Environmental
Engineering – UW-Madison

Foam that has PFAS...

- Can have bright white coloring
- Tends to pile up like shaving cream
- Can be sticky
- May blow inland and collect on lake shores and river banks
- Is usually lightweight

Naturally occurring foam...

- Is off-white and/or brown
- Often accumulates in bays, where there is circular movement of water, or river blockages
- May smell earthy or fishy

Natural Sea spume does not tend to fly around the bay!

Video attached.

As Kristina has suggested a test, would this not be of benefit to all as I'm pretty sure if even at very low levels you would not want children or dogs playing in said foam.

This would be beneficial data for the science panel and the hydrological survey currently in progress.

Kind regards

On Fri, 10 Mar 2023 at 10:14, Jonathan Renouf <J.Renouf4@gov.je> wrote:

Dear [REDACTED],

I'm afraid you've lost me on this one. I'm not sure what it is you are saying is the problem. Perhaps if you explain the issue, I can have a go at addressing it.

Best

Jonathan

From: [REDACTED]
Sent: 10 March 2023 09:58

To: Jonathan Renouf <J.Renouf4@gov.je>
Cc: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Kristina Moore <K.Moore2@gov.je>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: Re: No snow but foam will that do

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear Jonathan

I was not referring to airport foam flying around from the airport being today!

You carry on burying your head in the sand everyone else does a good job of it over here, the rest of the world acknowledges it and takes responsibility and cleans it up!

You clearly believe there is no problem and are not even concerned enough to test.

What happened yo leading the way and being top of the game?

Kind regards

On Fri, 10 Mar 2023 at 09:52, Jonathan Renouf <J.Renouf4@gov.je> wrote:

From the airport? With a westerly gale blowing? I think that's very unlikely. The law of occam's razor: the most likely explanation is the simplest one available. There's a westerly gale, it's high tide, the spume is clearly coming over the sea wall.

From: [REDACTED]
Sent: 10 March 2023 09:48
To: Jonathan Renouf <J.Renouf4@gov.je>
Cc: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Kristina Moore <K.Moore2@gov.je>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: Re: No snow but foam will that do

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

I suggest you actually go down and have a look then. Because it is flying around in the air just like the videos I have from it coming from the airport.

On Fri, 10 Mar 2023 at 09:27, Jonathan Renouf <J.Renouf4@gov.je> wrote:

It looks like spume to me.

From: [REDACTED]
Sent: 10 March 2023 09:25

To: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Kristina Moore <K.Moore2@gov.je>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Jonathan Renouf <J.Renouf4@gov.je>
Subject: No snow but foam will that do

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Good Morning

Would like to see environmental health palm this one off as sea spume!

Actually I'm sure it would be there for a while if anyone wanted a sample.

Care : If you have received this email and it was not intended for you, please reply to the sender, and then delete it. Please treat our information in confidence. This communication may contain legal advice which is confidential and/or privileged. It should not be forwarded or copied to anyone else without the prior permission of the sender.

Contract : This email does not form any binding agreement unless it is supported by an official States of Jersey purchase order form.

Content : All States information systems may be monitored to ensure that they are operating correctly. Furthermore, the content of emails and other data on these systems may be examined, in exceptional circumstances, for the purpose of investigating or detecting any unauthorised use. This email has been scanned for viruses by the States of Jersey email gateway.

Confidentiality and Privacy : The confidentiality of this e-mail and your reply cannot be guaranteed. As a public authority, the States of Jersey is subject to the provisions of the Freedom of Information (Jersey) Law 2011. Under this Law we may be required to disclose information we hold, including the contents of this email and any response to it, unless the information is protected from disclosure by an exemption under the Law or any other enactment, including the Data Protection (Jersey) Law 2018. We collect and process personal information about you under the Data Protection (Jersey) Law 2018. For more information on how we use your data please go to our privacy statement pages on www.gov.je.

From: [REDACTED]
To: [Jonathan Renouf](#)
Cc: [William Peggie](#); [REDACTED]
Subject: FW: No snow but foam will that do
Date: 16 March 2023 16:54:18
Attachments: [image001.png](#)

Dear Minister

As an update to the foam, following our discussion with the Arcadis team.

They are aware of a recent scientific paper on this where they did show that foaming action of heavy seas can cause the surfactant properties of PFAS to foam. Given PFAS is far less soluble in the more ionic solutions of saline water it has the potential to act as a potential small source term as it clings to the large volumes of organic sea foam and gets washed or blown back up the beach where it will settle and be knocked down from a foam back to a liquid.

This is difficult to quantify though, let alone assess the risk, if any. Quantities are likely to be small, but we will see what the sampling protocol is and get ahead of the game. There is an associated piece of work about the exchange of groundwater/PFAS and the sea and I think a more recent sampling of marine biota would be wise to offset any further comment from residents.

I have sent the holding email below saying we are looking into it and will send greater detail once we understand this more fully.

[REDACTED]

From: [REDACTED]
Sent: 16 March 2023 16:45
To: [REDACTED]
Cc: [REDACTED] Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED]
[REDACTED]@gov.je; Kristina Moore <K.Moore2@gov.je>; [REDACTED]
[REDACTED]@gov.je; [REDACTED]
<[REDACTED]@gov.je>
Subject: RE: No snow but foam will that do

Dear [REDACTED]

As an update, we have contacted the Arcadis team who are advising on the hydrogeological survey of St Ouen's Bay and Pont Marquet about the behaviour of PFAS and foam and protocols for sampling. Like most of our work, it is very much emerging science and they are well placed to research and offer the latest advice.

We are also keen to sample and better understand inland (freshwater) foaming events, and would appreciate it if you can notify us should you see this.

I will keep you updated.

Many thanks

[REDACTED]

From: [REDACTED]
Sent: 10 March 2023 17:19
To: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Cc: [REDACTED] Renouf <J.Renouf4@gov.je>; [REDACTED]
[REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Kristina Moore <K.Moore2@gov.je>; [REDACTED]
[REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)> [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: Re: No snow but foam will that do

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear [REDACTED] & [REDACTED]

Appreciate all your feedback and information, I do understand how sea spume works and know that it is normal for the time of year and even more so on a westerly wind.

However I will stand by if you are not testing the foam and if no one goes down to witness or take samples at the time of the incident you will never know.

Sea foam when I was a kid did not look like shaving foam nor did it at the other end of the beach.

I wish you all a lovely weekend.

Kind regards

[REDACTED]

On Fri, 10 Mar 2023 at 16:04, [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)> wrote:

Dear [REDACTED]

Thank you for bringing this to our attention. I shared this with Environmental Health who have provided assurance that this is normal for the time of year. They've said:

It's not unusual in windy weather and we've just had gale force winds from the west for many, many hours. It's not the time of year for algal blooms and we don't get them off the west coast.

It also occurred at a point of spring tide i.e. the water's higher than when it's a neap.

There is more information here - [What is sea foam? \(noaa.gov\)](https://www.noaa.gov/what-is-sea-foam/).

I hope that is helpful. For any more information, please contact environmentalhealth@gov.je

Best wishes,

[REDACTED]

[REDACTED]
Deputy Director of Public Health
Mobile [REDACTED]
E: [REDACTED]@gov.je

Pronouns – [REDACTED]
As part of managing my worklife balance I may communicate out of 9-5 hours. Please respond with your own balance in mind.

Government of Jersey
Ground Floor
[19-21 Broad Street | St Helier | Jersey | JE2 3RR](#)



From: [REDACTED]@gov.je>
Sent: 10 March 2023 10:20
To: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>
Subject: Fwd: No snow but foam will that do

[REDACTED]
Sent from [Outlook for iOS](#)

From: [REDACTED]
Sent: Friday, March 10, 2023 9:27:18 AM
To: [REDACTED]@gov.je>; [REDACTED]
Subject: Fwd: No snow but foam will that do

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Morning

FYI

[REDACTED]
----- Forwarded message -----

From: [REDACTED]
Date: Fri, 10 Mar 2023 at 09:25
Subject: No snow but foam will that do
To: [REDACTED]@gov.je>, Kristina Moore <K.Moore2@gov.je>, [REDACTED]
[REDACTED]@gov.je>, [REDACTED]@gov.je>, <j.renouf4@gov.je>

Good Morning

Would like to see environmental health palm this one off as sea spume!

Actually I'm sure it would be there for a while if anyone wanted a sample.

Care : If you have received this email and it was not intended for you, please reply to the sender, and then delete it. Please treat our information in confidence. This communication may contain legal advice which is confidential and/or privileged. It should not be forwarded or copied to anyone else without the prior permission of the sender.

Contract : This email does not form any binding agreement unless it is supported by an official States of Jersey purchase order form.

Content : All States information systems may be monitored to ensure that they are operating correctly. Furthermore, the content of emails and other data on these systems may be examined, in exceptional circumstances, for the purpose of investigating or detecting any unauthorised use. This email has been scanned for viruses by the States of Jersey email gateway.

Confidentiality and Privacy : The confidentiality of this e-mail and your reply cannot be guaranteed. As a public authority, the States of Jersey is subject to the provisions of the Freedom of Information (Jersey) Law 2011. Under this Law we may be required to disclose information we hold, including the contents of this email and any response to it, unless the information is protected from disclosure by an exemption under the Law or any other enactment, including the Data Protection (Jersey) Law 2018. We collect and process personal information about you under the Data Protection (Jersey) Law 2018. For more information on how we use your data please go to our privacy statement pages on www.gov.je.

From: [William Peggie](#)
To: [REDACTED] [Jonathan Renouf](#); [REDACTED] [REDACTED] [REDACTED]
Cc: [REDACTED]
Subject: RE: 'Pollutants and Contaminants and their impact on Jersey's Population and Environment'
Date: 11 April 2023 15:44:36
Attachments: [image001.png](#)

Thanks [REDACTED] – happy to discuss on teams – much appreciated
W

From: [REDACTED] [REDACTED] <[REDACTED]@gov.je>
Sent: 11 April 2023 15:19
To: Jonathan Renouf <J.Renouf4@gov.je>; William Peggie [REDACTED] <[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>
Cc: [REDACTED] <[REDACTED]@gov.je>
Subject: RE: 'Pollutants and Contaminants and their impact on Jersey's Population and Environment'

Thanks Willie and Minister

I am about to go into a PFAS meeting and will see to this at 4pm.

I can add quite a bit as I have been trying to foster new working relationships with SOS by providing them with reliable data.

[REDACTED]

From: Jonathan Renouf <J.Renouf4@gov.je>
Sent: 11 April 2023 15:09
To: William Peggie [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Cc: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Subject: Re: 'Pollutants and Contaminants and their impact on Jersey's Population and Environment'

It would be helpful to hear from [REDACTED] [REDACTED], thanks for the speedy response

From: [REDACTED]
To: [Jonathan Renouf](#)
Cc: [REDACTED]; [REDACTED]; [REDACTED]; [William Peggie](#)
Subject: RE: "Pollutants and Contaminants and their impact on Jersey's Population and Environment"
Date: 11 April 2023 17:45:03
Attachments: [image001.png](#)

Dear Minister

Please see some information below, which I trust you find useful

[REDACTED]

Officers from the department are always willing to engage and work with NGOs and the public. Natural Environment Officers routinely work closely with individuals and groups who provide a valuable service, especially given our lack of resources to cover all work areas.

Officers in the Department have extensive experience and are qualified both in monitoring and legal aspects of submitting case files for potential prosecution. The regulatory activities undertaken by [REDACTED] Control and the former Environmental Protection team adhere to strict enforcement policies and protocols that are reviewed and agreed by the Attorney General.

As regulators, officers must deliver the maximum safeguard to the integrity of any investigation being undertaken. Allowing information to be shared with third parties or the media could result in the defence in any subsequent court hearing to argue that they have not received a fair trial. Failure of a potential court proceeding on such a technicality is something which, I believe, all parties wish to avoid. Officers are therefore unable to provide any details of any investigation into the possible water [REDACTED] breaches and this leads to criticism and claims of not caring by SOS.

I understand that, at the time, officers followed up on all reports submitted by Save our Shoreline, and included them as part of the case file where appropriate. Officers spent many hours compiling evidence for both the incidents during the build at the Energy from waste plant and during the build of Horizon that are mentioned in the SOS report. These discussions with SOS are not new and they have been previously discussed at length and highlighted to the Attorney General's Office. I understand that the EFW investigation was reviewed by the Attorney General and the Environment Scrutiny Panel who found that it had been undertaken in accordance with policies and procedures.

Pertinent is the legal definition of [REDACTED] that must be understood. According to Article 4 of the Water [REDACTED] (Jersey) Law 2000, [REDACTED] does not occur until one of the four arms of the law is satisfied. Basically this means that there must be some evidence of environmental harm or use of an amenity. Again all these aspects were closely sampled and monitored by officers. Muddy water entering the bay is not in itself [REDACTED] in the legal sense.

I am pleased to report that the regulatory and science/advisory functions have now been split between Regulation and Natural Environment respectively. The majority of States regulators are now in one directorate will enable Government to continue to ensure consistency, transparency, proportionality and targeting of any enforcement action.

One must exercise extreme caution in interpreting the shellfish data on heavy metals contained

in the report. Especially given the length of time during storage. This is because the report's conclusions are based on very few samples collected over a protracted period. Again linking this to La Collette must also be treated with caution given the lack of data and that other factors that might be at play.

Department Officers have collected extensive records of heavy metals in shellfish and seaweeds from across the southern coast of Jersey. This data extends back to 1993 and is available to SOS should they wish to examine a full and robust data set. Regulation also hold data for La Collette that is collected by Ops and Transport to monitor water coming off the site. This has been offered and is available to SOS should they wish.

The failure of the present Sewage Treatment to meet its regulatory limit for nitrogen is well known and was one reason why the Island invested in a new up to date works to replace a facility that was frankly outdated and no longer fit for purpose. The new sewage works will shortly be commissioned and will result in improvements. The former limit for nitrogen was based on a standard bay as defined in an EU Directive. Officers from both Ops and Transport and Natural Environment have worked closely together to better define the environmental standards for the bay and officers from regulation are currently compiling a revised discharge permit again that is fit for purpose and represents best practice.

Important to this are the reducing of all land based inputs of nitrogen into St Aubin's Bay, primarily from agricultural activities and the good work of the joint industry/Government Action for Cleaner Water Group.

I acknowledge the important role that pressure groups play and Environmental Protection will continue to try to liaise with SOS but I am conscious of the time it takes from officers to answer and re-answer their concerns. Time that takes away from regulating the very resource that we are both trying to protect.

From: William Peggie <[REDACTED]@gov.je>

Sent: 11 April 2023 17:32

To: Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>; [REDACTED]@gov.je>

Subject: RE: 'Pollutants and Contaminants and their impact on Jersey's Population and Environment'

Please excuse the peace meal response – with the issues being spread over many years we are dredging colleagues memories.....this from [REDACTED] after we have discussed that we were in discussion with DEFRA who also confirmed our positioning with regards RAMSAR secretariat:

suggested lines :

1. We work closely with both the local Ramsar Management Authority and colleagues in the UK to ensure we comply with our responsibilities in respect of Ramsar and all International Agreements that are extended to Jersey.
2. We have an extensive heavy metal monitoring programme that started in the mid 1990s,

sampling a range of marine species several times a year from a number of sites. The data is published in the marine resources annual report. That data, which shows some variability, indicates there is a general correlation between the different sites, and therefore not indicative of point source contamination for these metals.

From: William Peggie

Sent: 11 April 2023 17:18

To: Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED] <[REDACTED]@gov.je>; [REDACTED]

[REDACTED] <[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>; [REDACTED]

[REDACTED] <[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>

Subject: RE: 'Pollutants and Contaminants and their impact on Jersey's Population and Environment'

Thanks Minister, Tim and I spoke 10 mins ago , he can expand on the outfall testing and Paul's point regarding Ramsar has jolted my memory – As we (government) are the signatory to the Ramsar convention through the UK we do not have to notify the secretariat of development within or adjacent to a Ramsar site, instead we would require that development takes account of the special nature of the area through , for example an EIA / Environmental Assessment. When this was a "live issue" we discussed this with the secretariat.

With regards

W

From: [REDACTED]
To: [William Pegg](#); [Jonathan Renouf](#); [REDACTED] [REDACTED] [REDACTED] [REDACTED]
Subject: RE: "Pollutants and Contaminants and their impact on Jersey's Population and Environment"
Date: 11 April 2023 19:45:09
Attachments: [image001.png](#)

Thanks Willie

I have re-read the report and there is nothing new that has not been debated, investigated and reported on at some considerable length by previous Attorney General's, Ministers and the media. Officers have tried all manner of engagement with SOS from Scrutiny Panel hearings, private closed door meetings, to sitting down with law officers etc.

Much of the content is old, conjecture and, more concerning, simply once again causing scare mongering for the public. Everyone drinking PFAS in water distributed by Jersey Water and all the medically non-proven links with illness given is just one irresponsible example.

[REDACTED]

From: [REDACTED]
To: Jonathan Renouf
Cc: William Peggie; [REDACTED]
Subject: Oral question on PFAS - text for the Chief Minister
Date: 17 April 2023 09:15:30
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[Oral Question - April 2023 .docx](#)

Dear Minister

For info: please see attached some text to an oral question that I prepared for the Chief Minister on PFAS.

I thought that the media on the SOS report went very well.

[REDACTED]

From: [REDACTED]
Sent: 13 April 2023 17:16
To: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>
Cc: William Peggie [REDACTED]@gov.je>; [REDACTED]@gov.je>
Subject: RE: [REDACTED] mentioned you in "Questions".

Good afternoon Tim,

Many thanks for your email. The Chief Minister will be considering draft answers to OQs tomorrow, at 1430, so if you could contribute to the draft answer by then, that would be helpful.

Grace is already looking at the question from a public health perspective but it would be useful if you could add a few points on the environmental aspect and any updates in relation to that.

Best wishes,

[REDACTED]

From: [REDACTED]@gov.je>
Sent: 13 April 2023 17:12
To: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]
Cc: William Peggie [REDACTED]@gov.je>; [REDACTED]@gov.je>
Subject: FW: Jonathan Sykes mentioned you in "Questions".

[REDACTED] I am not sure if you have has sight of this oral question. We can work on it together, if easier.

[REDACTED] what is the deadline for this please. I note it is an oral question so supplementaries expected! For clarity, are you expecting me to answer in full or add a few points as you suggest?

Thanks

From: [REDACTED]@gov.je>
Sent: 13 April 2023 16:43
To: [REDACTED]@gov.je>
Subject: [REDACTED] mentioned you in "Questions".



[REDACTED] mentioned you



On the *OQ.065/2023* list item in **Questions**



[REDACTED] mentioned you

[REDACTED] Could you please include a few points in relation to this from your respective department?"

[Go to comment](#)

[Why am I receiving this notification from Lists?](#)

Please make a copy before using

ORAL QUESTION FOR TUESDAY 18th APRIL 2023

Deputy L.J. Farnham of St. Mary, St. Ouen and St. Peter will ask the following question of the Minister for Health and Social Services

“Will the Chief Minister provide the Assembly with an update on matters relating to PFOS and the historic plume in the St Ouen’s bay area, in particular the outcomes of the health testing that was instigated by the previous Government?”

Max: 70 words

Answer

People who had lived in the plume areas, had drunk water from private water supplies before 2006 and had a health symptom were offered blood testing. A total of 88 people were tested.

There is no current guidance or international agreement about how blood test results should be interpreted. An existing data set from a USA reference [REDACTED] was used to evaluate the Jersey data.

The results indicate that 30% of the people in the plume had higher values than 95% of the people tested in US reference [REDACTED] for PFOS. This increased to 70% of people tested for another PFAS compound PFHxS.

The implications of PFAS in blood on health is an emerging area of science, and is highly specialised. Consequently, Public Health are setting up a Scientific Advisory Panel who will provide advice and guidance to Government about what interventions should be undertaken to reduce the blood levels of PFAS, what the health harms might be, and advise on environmental matters also. Recruitment is underway, and the panel will have their first meeting in May.

Hydrogeological & PFAS transport studies across two water catchments (St Ouen’s Bay and Pont Marquet) to assess PFAS migration, potential risks and inform additional management and/or remediation (clean-up) options is currently being undertaken.

The study will work alongside and compliment current work by Ports of Jersey (Jersey Airport) to investigate and remediate PFAS within the airport perimeter and inform public water (Jersey Water) treatment and supply work.

Supplementary questions

Note: there might be questions on specific health and environment matters. Many can be answered by stating that PFAS is an area in which scientific understanding is rapidly developing across the globe.

Government, in undertaking blood testing and sampling of water using the most recent laboratory techniques, is quite rightly pushing at the boundaries of current international understanding on PFAS science.

This is why Government are appointing an PFAS Scientific Advisory Panel comprised of global experts. The Panel will give independent advice to government on PFAS issues. This will include providing informed, evidenced based views and clinical advice exploring the evidence, strength and limitations of the most appropriate approaches regarding next steps and remedial action regarding the government's approach to PFAS.

This answer can relate to questions such as:

What interventions are advised for people with high levels of PFAS in blood?

What is the effectiveness of blood donation in removing PFAS from blood?

What are the clinical implications of offering blood donation?

What levels of PFAS in the blood are considered harmful to health?

When should re-testing be undertaken for affected Islanders?

What are the most appropriate approaches to environmental management & what advice would you provide for flora & fauna

Are you concerned about the high levels of PFAS found in blood?

There is no international agreement about how to interpret blood results, therefore it is difficult to reach conclusions on the significance of levels in the blood that has been tested.

We are in the process of establishing an Independent PFAS Scientific Panel, who will examine, report, and make recommendations on agreed topics including testing.

What topics will the PFAS Scientific Advisory Panel look into?

██████████ will chair the panel, which will report to the Director of Public Health. During the panel's term they will examine set topics and provide reports. The topics and reports will enable an evidenced-informed approach to decision-making, allowing for a considered response to PFAS matters on the Island.

The topics the panel will report on are:

1. Clinical interventions
2. Assessment of evidence on health impacts of PFAS
3. PFAS blood testing and re-testing
4. Environmental management

What are the qualifications of the Chair of the Panel?

██████████ is a doctor and has experience in leading multi-disciplinary panel as well as leading programmes relating to the environment and health, the development of new healthcare technologies and the development of rules and policies. ██████████ is currently in the process of appointing additional members to sit with ██████████ on the panel.

How safe is our public drinking water with PFAS?

To manage the current water quality risk, Jersey Water monitor the level of PFAS at the treatment works and in the affected water sources through an extensive sampling and analysis programme.

The results of their testing provide assurance that the drinking water supply in Jersey remains fully compliant with water quality limits for PFAS set by the EU Drinking Water Directive and current UK Regulations.

Jersey Water test the drinking water monthly and all results are below the stipulated concentrations as set by the Drinking Water Inspectorate (<0.01µg/L).

Given the myriad of uses, is PFAS present across the island?

A comprehensive survey of boreholes and the streams across Jersey has been completed by Natural Environment using the best available PFAS analytical suites. Currently, there is no indication of large sources of PFAS in other island areas.

What were the sources of PFOS in Jersey?

PFAS is a ubiquitous group of chemicals present in nearly all environments, however, PFAS in Jersey mainly originated from the historic use of firefighting foam at Jersey Airport.

This was common practice at airports at that time, with training and equipment calibration occurring within the fire training ground and across parts of the airfield as well as responding to historic air crashes.

The firefighting ground was redeveloped, with impacted material encapsulated (contained) in 2004, and the use of PFAS foams ultimately stopped with monitoring of the plume extending westwards into St Ouen's Bay having taken place for some 20 years. Recent sampling has identified potential PFAS extending south of the airport to the Pont Marquet catchment. Almost all properties in the plume area in St Ouen's Bay have been connected to mains water.

What testing is used for PFAS?

Natural Environment have used an accredited laboratory in the UK to undertake PFAS analysis for a suite of 47 different PFAS compounds since September 2022, prior to this it was only possible to analysis for a suite of 17 PFAS compounds including PFOS and PFOA, which has been completed for many years.

New and extended suites for the analysis of PFAS are used by Natural Environment as soon as they become available. This helps the Government to keep ahead of the fast-moving science and understanding of PFAS. Advanced analysis will be employed within the hydrogeological studies to assess an even wider range of compounds, including precursor PFAS.

Can PFAS in water be removed by treatment?

There are a number of different treatment options to remove PFAS compounds from drinking water. Jersey Water has completed high level optioneering on the treatment options available and completed bench test trials using SAFF (surface active foam fractionation) removal process. Detailed costs are not currently available. Currently, PFAS levels are effectively managed through testing and raw water blending.

However, levels of PFAS in the stream and borehole water sources for Jersey Water present a significant raw water quality challenge which is set against the need to ensure security of supply despite increasing population demands and climate change.

A key objective of the PFAS hydrogeological study is to assess options, or combination of options, which would best protect drinking water supplies considering source area remediation, pathway interception, receptor management as well as drinking water treatment.

From: [REDACTED]
To: [Jonathan Renouf](#)
Cc: [REDACTED]
Subject: FW: URGENT APPROVAL NEEDED: PFAS
Date: 24 April 2023 10:01:26
Attachments: [image003.png](#)
Importance: High

Hi Jonathan

Please can you confirm you are ok with the PFAS Answers re-Readers Digest - see the link below.

Thanks

[REDACTED]

From: [REDACTED]@gov.je>
Sent: 24 April 2023 09:32
To: [REDACTED]@gov.je>
Subject: URGENT APPROVAL NEEDED: PFAS
Importance: High

Hi [REDACTED]

Readers Digest is doing a feature of 'forever chemicals' in water and has enquired about PFAS in the Island. This is off the back of this ITV article:

<https://www.itv.com/news/channel/2022-10-18/higher-than-expected-pfas-levels-confirmed-in-jersey-blood-samples>.

The answers in the document below have been supplied by Public Health and Natural Environment.

Please can you seek urgent sign off from MENV on these answers [REDACTED]

[REDACTED]

MHSS has approved and [REDACTED] is handling sign off from [REDACTED]

[PFAS Answers for Readers Digest.docx \(sharepoint.com\)](#)

Many thanks,

[REDACTED]

Assistant Communications Officer | Public Health

Cabinet Office

Government of Jersey

19-21 Broad Street | St Helier | Jersey | JE2 3RR



From: [REDACTED]
To: [Jonathan Renouf](#)
Cc: [William Peggie](#)
Subject: FW: PFAS / PFOS
Date: 12 June 2023 12:06:41

Dear Minister

I attended the meeting of residents and the Chair of the Expert Panel to which [REDACTED] refers.

It makes sense that NE support the work of Health in this area and provide a consistent approach in engagement to build trust with the residents. I would not perhaps go to the same extent as the Panel in involvement of the residents in drafting TOR and structure for each report – however I will input as required to prevent NE from being viewed as the ‘bad guys’.

The expert panel will produce five reports- and the fourth is the environment one which will have our closer involvement. I will push for it to also touch on biota/shellfish monitoring and foam etc.

I have the regular technical officer group meeting (health, JW and ourselves) tomorrow and will be discussing how we work with the new expert panel.

The bad feeling against Government (and Ports) mentioned by [REDACTED] was primarily historic [REDACTED] and Ports use of fire-fighting foam. There was also a bit on Jersey Water continuing to pollute mains water from the well fields and [REDACTED]. This is incorrect and I explained this at the meeting and subsequently.

My advice is that as Minister you could be brought into a later meeting with residents as Peter suggests (with the Health Minister) and give the reassurance that one cannot change history but that the ongoing work is totally independent with no hidden agendas and that you will do your utmost to consider and where necessary support any recommendations of the panel going forward.

[REDACTED]

From: William Peggie [REDACTED]@gov.je>
Sent: Monday, June 12, 2023 11:01 AM
To: [REDACTED]@gov.je>
Subject: FW: PFAS / PFOS

Fyi [REDACTED]

Thanks

W

From: [REDACTED] <[REDACTED]@gov.je>
Sent: Monday, June 12, 2023 10:59 AM
To: Jonathan Renouf <J.Renouf4@gov.je>; William Peggie [REDACTED] <[REDACTED]@gov.je>
Subject: RE: PFAS / PFOS

Dear Minister

I entirely agree. We were very clear that the meeting was for the panel to meet residents. I was there to support the panel and to make it known that residents that can still come to me directly with queries.

Now this has happened, I wonder if it would be sensible for us to suggest options for a meeting cycle which could be approved by ministers. For example, we might suggest ministers meet residents following the publication of a relevant report but they would not be expected at other meetings.

I hope this is a helpful suggestion.

Best wishes

From: Jonathan Renouf <J.Renouf4@gov.je>
Sent: 09 June 2023 21:03
To: William Peggie [REDACTED] <[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>
Subject: Fw: PFAS / PFOS

Hi gents,

Please see the correspondence below. I was of the view that the meeting last night was for the panel to meet with residents, it had not occurred to me to attend in my ministerial capacity. Should we rethink this? Should we have political representation at all times when meeting with residents? Personally, I am keen to keep political position separate from scientific analysis, but if every meeting is going to get political anyway, perhaps we should rethink.

Peter, you were there, what do you think?

Best

J

From: [REDACTED]
Sent: 09 June 2023 18:11
To: Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED] <[REDACTED]@gov.je>
Cc: Lyndon Farnham <L.Farnham@gov.je>
Subject: RE: PFAS / PFOS

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Jonathan

I don't agree, however I would have expected apologies to be send with clear reasons.

The Chair took question after question which were 100% political. In fairness [REDACTED] was excellent, and it was not the place for [REDACTED] to intervene. Quite frankly [REDACTED] was hung out to dry

I'm afraid you got that wrong, they were left with no change to their view that Government doesn't rarely care

[REDACTED]

From: Jonathan Renouf <J.Renouf4@gov.je>
Sent: Friday, June 9, 2023 5:56 PM
To: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>
Cc: Lyndon Farnham <L.Farnham@gov.je>
Subject: Re: PFAS / PFOS

Dear [REDACTED]

Thanks for your email. I too am delighted at the launch of the Panel, which will enhance the rigour and authority of ongoing scientific work.

The meeting was an opportunity for residents to be introduced to the Panel. Their work is not political, and not influenced by politicians. Had I, as a relevant minister been there, it might have hinted at a lack of independence on the part of the panel.

Best

J

From: [REDACTED]
Sent: 09 June 2023 17:25
To: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Jonathan Renouf <J.Renouf4@gov.je>
Cc: Lyndon Farnham <L.Farnham@gov.je>
Subject: PFAS / PFOS

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

I was delighted with the launch of the PFAS Scientific Advisory Panel, and attended a briefing last night introducing the Chair and what they hope to achieve over the next few months.

However I was extremely disappointed that there was no political representation. This now has a 34 year history. Many are ill, and many believe some have died as a result. What they need is to be assured that they have political support either from their Deputy (ise), or the Council of Minister, or ideally both!

Care : If you have received this email and it was not intended for you, please reply to the sender, and then delete it. Please treat our information in confidence. This communication may contain legal advice which is confidential and/or privileged. It should not be forwarded or copied to anyone else without the prior permission of the sender.

Content : All States information systems may be monitored to ensure that they are operating correctly. Furthermore, the content of emails and other data on these systems may be examined, in exceptional circumstances, for the purpose of investigating or detecting any unauthorised use. This email has been scanned for viruses by the States of Jersey email gateway.

```
*****
*****
```

From: [REDACTED]
To: [Kristina Moore](#); [Karen Wilson](#); [Jonathan Renouf](#)
Cc: [REDACTED]
Subject: RE: Who is our representative? Public Health meeting St Peter's Parish hall Monday 26th June
Date: 04 July 2023 09:05:59
Attachments: [image001.png](#)

Dear Ministers,

Following your emails, my discussions with the Minister for HSS, and a discussion with public health colleagues, can I suggest the following response is released. Please let me know if this is agreeable.

"Dear [REDACTED]

Having received your latest email, I have been in discussion with my Ministerial colleagues and my own officers supporting this work.

We have agreed that we will ask all officers supporting the issue of PFAS to provide a comprehensive and single response to your queries, rather than sending separate emails.

We will look to respond as soon as reasonably practicable but please note that some time will be needed to bring together the information/answers you seek as it will require responses from across several arms of government and the agreement of the respective Minister for each: for example, myself for Public Health aspects and Deputy Renouf for the water testing aspects.

I trust the above is an agreeable approach.

Kind regards,

[MHSS SIGNATURE]"

[REDACTED]
Private Secretary
Minister for Health and Social Services

Direct [REDACTED]

Government of Jersey
19-21 Broad Street | St Helier | Jersey | JE2 3RR



From: Kristina Moore <K.Moore2@gov.je>
Sent: Sunday, July 2, 2023 9:38 PM
To: Karen Wilson <K.Wilson2@gov.je>; [REDACTED] <[REDACTED]@gov.je>
Cc: Jonathan Renouf <J.Renouf4@gov.je>; [REDACTED] <[REDACTED]@gov.je>
Subject: Re: Who is our representative? Public Health meeting St Peter's Parish hall Monday 26th June

Dear [REDACTED]

Thank you for your thoughtful email.

The idea of setting up a political oversight group is a good one. This would be useful in order to formally receive information from the advisory panel and discuss decisions required to move forward.

I do agree that we need a greater level of assurance with regard the communication that is being shared with those affected as the tone and nature of [REDACTED] email suggests there is an ongoing problem.

Best,

Kristina

From: Karen Wilson <K.Wilson2@gov.je>

Date: Sunday, 2 July 2023 at 20:12

To: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>

Cc: Jonathan Renouf <J.Renouf4@gov.je>, Kristina Moore <K.Moore2@gov.je>, [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>

Subject: RE: Who is our representative? Public Health meeting St Peter's Parish hall
Monday 26th June

Good evening [REDACTED]

There are several issues here if we are to address the trust and confidence concerns residents have. There appears to be some gaps in the assurance suggesting current plans are not sufficiently robust to address residents' concerns regarding coordination of activities and communications. My understanding is that Grace was the lead officer from Public Health for PFAS— is this still correct?

Regarding [REDACTED] concerns about communications can we be confident the mailing list and preferred method of communications for residents is regularly updated for additions/changes and is there further newsletter scheduled (I believe the last one was March) and in line with the frequency of the comms we agreed with residents?

For completeness might we restate in the next and following newsletters please:

- The role of public health in PFAS
- The role of the environmental health department in PFAS
- The role and timescales associated with the work of the Scientific Panel
- Ministerial leadership arrangements and relevant Lead Officers for advice and communications
- Details of the communications and engagement plan with residents –that should for example include updates/advice/details regarding (i) the Scientific panel (ii) health concerns (iii) environmental concerns (iv) legal updates (v) named individuals and contacts (vi) schedule of engagement meetings with/and/or date of newsletter to residents.

It may be appropriate at this stage to convene a Ministerial Oversight Group to address key risks, mitigation and communication messages and the frequency of this – Deputy Renouf and the

Chief Minister will also have a view on approach.

I have agreed to meet residents to purely offer a listening ear – and have been very clear my engagement is on this basis only. We do need to consider if there is now a need to address any care needs that may have either been overlooked or currently problematic as part of our response to residents' concerns. I have been very clear with [REDACTED] that this is the basis on which I am happy to meet residents and that I will be guided by the advice from the scientific panel regarding any clinical interventions that are outside of what might be considered 'normal' arrangements. I refer specifically (as an example) to 'blood letting' treatment.

Kind regards
Karen

Deputy Karen Wilson, St Clement
Minister for Health and Social Services

Direct +44 (0)1534 [REDACTED]

Government of Jersey
19-21 Broad Street | St Helier | Jersey | JE2 3RR



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

Sent: Friday, June 30, 2023 1:16 PM

To: Kristina Moore <K.Moore2@gov.je>; Karen Wilson <K.Wilson2@gov.je>; Jonathan Renouf <J.Renouf4@gov.je>

Cc: [REDACTED] <[REDACTED]@gov.je>; [REDACTED] <[REDACTED]@gov.je>

Subject: RE: Who is our representative? Public Health meeting St Peter's Parish hall Monday 26th June

Dear Ministers

We have picked up this correspondence and we will try to clarify the request and propose some options for your consideration. I will keep [REDACTED] and [REDACTED] updated.

Best wishes
[REDACTED]

From: [REDACTED]

Sent: 30 June 2023 12:27

To: Kristina Moore <K.Moore2@gov.je>; Karen Wilson <K.Wilson2@gov.je>; [REDACTED]

[REDACTED] Jonathan Renouf <J.Renouf4@gov.je>; Lucy Stephenson

[REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; Lyndon Farnham <L.Farnham@gov.je>; Richard Vibert

<R.Vibert2@gov.je>; [REDACTED]

[REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED]

[REDACTED]@gov.je>; [REDACTED]; PFASpanel@gov.je; [REDACTED]
[REDACTED]@gov.je>

Subject: Who is our representative? Public Health meeting St Peter's Parish hall Monday 26th June

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear Kristina & Karen

Please at least have the decency to acknowledge and reply to my main question, "**Who is our government representative that will respond to our concerns?**"

Apologies for starting my email off like this, however as I explained that I had already waited 6 months to actually meet you, Karen, and I don't always get a reply, for me communication is key.

Thank you both for your time on Monday evening at the parish hall and for listening to my concerns regarding the PFAS problem in Jersey.

As I received an email from [REDACTED] of public health on Tuesday, stating **I had requested more information regarding the PFAS panel**, I was unsure if this request came from either of you. It may have been a busy evening for you both and whilst it is still fresh in my mind I just wanted to forward you both on some of my concerns that I raised with you, as not understanding the PFAS panel was definitely not one of them. I have attended meetings and watched the first gathering of them that I have no issues with understanding how the Panel is working, how I believe the outcome of it all is a very different matter as mentioned, I firmly believe that the **Government have already made certain decisions and** [REDACTED]
[REDACTED]

I came to see you Karen as I believe there is a huge lack of communication, confidence and support from our government, for the islanders that have been affected by the consumption of PFAS, primarily through being allowed to drink it out of our boreholes and **still continue to through our mains water supply, all be it diluted.**

Karen, you said that the go to ministerial person was you, however you turn to the public health team for your advice and that you had signed off a letter that was sent out to everyone (**I disagree that this went to everyone**) explaining that there was a **name of a gentleman on it that we could contact**, you were going to get back to me the day after with to whom this was, unfortunately I have not heard from you, which is what has prompted me to write today.

I asked what had been put in place with the government since we had last met in December, you said that **we have no one with any expert advice and were relying wholly on the Advisory Panel for everything and we will have to wait for advice, you stated that we needed a communications person, which is what you had asked the public health team to take on, so please can you let me know who this is.**

So, for the islanders that have concerns, who should they be contacting? As I said, I appreciate that Peter Bradley and [REDACTED] stood up and explained how the panel and public health was working, however they experienced a lot of anger, confusion,

frustration and upset from some of the residents about things out of their control, they did a very good job of explaining what they could within their level of expertise to assist the residents however they should not have been put in that position and someone from government should have been there to answer those questions / concerns.

I was simply after finding out who our government representative was or to whom we should be directing questions, you both felt that someone had been put in place for this but was unsure as to who it was. Karen, you were going to email me the day after with a name for who we can contact, is this [REDACTED]?

Kristina, you found it very interesting as to what's going on with the lawsuits in America [REDACTED] You also stated that you feel that residents need answers, advice and a way forward, I expressed that we are not getting that and I want to know what's going on, Kristina you want to prove me wrong and stated that something will happen going forward we have been let down way too many times for me to believe anyone, so unless you can prove me wrong my beliefs will stay the same.

The Scientific Panel seems to be the scapegoat for the Government, Kristina you had not even heard what the outcome from the first panel meeting was.

The science panel is there to give the best scientific evidence on PFAS present to date and provide recommendations, supposedly, transparently, it is not there to offer healthcare or advise who should be paying for said healthcare? It is not there to support the residents; it is there to prop up an inefficient uneducated Government! The panel is already lying to the public as their first report has been dictated to them by public health / the A.G. or whoever else seems to be involved. Their involvement is already a lie, and they are only on report number one, which has not been their choice? They are clearly not independant!!!

I would also like to state again that one of my biggest concerns regarding all of this is that you are still blending this into our main water supply, therefore topping up every bodies already high levels and supplying the rest of the island with a form of a poisonous chemical, surely you do not need a Scientific panel to explain this to you and this should be of paramount importance to all states members, to put something in place to stop this.

Karen, you wanted communication to be really tight, I don't see it. Maybe having been let down so many times in the past is why I didn't leave with much hope, I know Karen, you said that you will assure us that you will do your best and that the communication side of this is very important to you, you offered that you would take the hit and hold a meeting with the residents that are concerned, please do not let us down.

Some people still have not had their blood test results, who is pulling all of this together?

Kind regards


[REDACTED]

From: [REDACTED]
To: [Kristina Moore](#); [Karen Wilson](#); [Jonathan Renouf](#)
Cc: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]
Subject: FOR REVIEW | Comprehensive Response to [REDACTED] Re: PFAS
Date: 12 July 2023 16:17:25
Attachments: [image001.png](#)
[image002.png](#)
Importance: High

Dear Chief Minister and Ministers,

Further to [REDACTED]'s email which contained various queries, we have prepared a comprehensive response (accessible through the link below) which is now ready for you to review. This has been prepared by officers and has been sighted by the Attorney General.

Please can you confirm if you are content with your parts of the letter – the document will autosave and auto-track changes so feel free to amend your parts as needed to ensure the tone, for example, is appropriate.

 [Letter - 2023.07.DD - 2023.085 - CM, MHSS, MENV to \[REDACTED\] - Re Various PFAS Queries.docx](#)

[REDACTED]
Private Secretary
Minister for Health and Social Services

Direct +44 (0)1534 [REDACTED]

Government of Jersey
19-21 Broad Street | St Helier | Jersey | JE2 3RR



19-21 Broad Street | St Helier
Jersey | JE2 4WE

[REDACTED]
BY EMAIL

31 July 2023

Dear [REDACTED]

Re: Various PFAS Queries

Thank you for your continued patience waiting for a comprehensive response to your recent queries; as you will see, your queries required responses from a number of Ministers and officers. For ease, we have thought it best to respond collectively via a letter so that each query is clearly numbered, and it is clear who has responded to each.

1) Who is our government representative that will respond to our concerns?

[REDACTED]
Minister for Health and Social Services, Deputy Wilson: As the Minister for Health and Social Services, I am responsible for matters relating to Health and the Minister for the Environment is responsible for matters relating to the Environment which, for example, includes water testing.

2) I firmly believe the Government have already made certain decisions

[REDACTED]
Minister for Health and Social Services, Deputy Wilson: I can confirm that no decisions have been made on matters which the Panel are being asked to advise on. The topics of the reports that the Panel are being asked to write were devised by Public Health, based on their understanding of the issues and engagement with Islanders. Specifically, information provided at the meeting in public on 8 December 2022 informed the questions, to ensure that the reports are meaningful for Islanders.

The Panel is independent, and that means that the way that they go about their work and use evidence is not influenced by Ministers. Reports will be presented to me and my colleagues as the recommendations will need to be reviewed to enable appropriate decision making about what we can take forward.

[REDACTED], **Panel Chair:** I can confirm that no constraints have been placed upon the Panel with regard to how we assess the evidence and come to our recommendations. Furthermore, it has been agreed that almost all of our activities will be in public. No pressure has been brought to bear on me or the other Panel members.

3) I came to see you Karen as I believe there is a huge lack of communication, confidence and support from our government, for the islanders that have been affected by the consumption of PFAS, primarily through being allowed to drink it out of our boreholes and still continue to through our mains water supply, all be it diluted.

Minister for Health and Social Services, Deputy Wilson: I'm sorry that you feel that communication is still not as you would like it to be. The Public Health directorate are regularly communicating with affected Islanders in the following ways but, of course, if you have any alternatives that you can suggest, we will gladly consider them.

- Newsletters are emailed or posted. This has been approximately monthly but relate specifically to when there is something to communicate. There have been newsletters in the following months: February, March, April, May, and June, and they are also now available from the PFAS pages on the Government of Jersey website ([available here](#)).
- On 8 June, Public Health held a meeting in public to launch the Panel. Affected Islanders were able to meet the Chair, hear from [redacted] about the process for the development of reports by the Panel and were able to ask questions and provide feedback on the Panel's proposals.
- We have committed to communicating with Islanders to consult at the start of the process, on the draft reports and for the launch of reports.

Furthermore, there has been additional communication with three of the affected Islanders, who have been involved in recruitment for the Panel members. The Chair of the Panel has committed to a monthly meeting with them to keep them updated and to enable quicker and easier communication between the Panel and Islanders.

Finally, the PFAS pages on the Government of Jersey website are live, and documents such as dates of meetings and minutes of meetings are available from there and is regularly updated. The link is here: [PFAS in Jersey](#).

- 4) Karen, you said that the go to ministerial person was you, however you turned to the [redacted] who had signed on a letter that was sent out to everyone (I disagree that this went to everyone) explaining that there was a name of a gentleman on it that we could contact, you were going to get back to me the day after with to whom this was, unfortunately I have not heard from you, which is what has prompted me to write today.

Minister for Health and Social Services, Deputy Wilson: For matters of health, yes, I am the Minister responsible. I do turn to my Public Health team for advice to enable me to take decisions and provide critique and challenge to ensure that their actions are in line with my vision for the future. The person I was referring to was [redacted], who is the Chair of the Panel, who I understand has been in touch with you to arrange a meeting.

Director of Public Health, Dr Peter Bradley: You raised a concern about the newsletter not being sent to everyone. It has been sent to all of those that we have the contact details for. A concern was raised with us previously that not everyone was on the distribution list, and we specifically asked for anyone who is not already receiving the newsletter to provide us with their contact information at the meeting on 8 June, and a number of people gave us their details, and they have been added to the list. If you become aware of people who are not on the list who would like to be, please ask them to contact publichealth@gov.je and they will be added.

- 5) I asked what had been put in place with the government since we had last met in December, you said that we have no one with any expert advice and were relying wholly on the Advisory Panel for everything and we will have to wait for advice, you stated that we needed a communications person, which is what you had asked the public health team to take on, so please can you let me know who this is.

- U

discuss d

to listen to

- 7) Kristine

will be ag

- 8) The scie

As described above, the Panel are independent in the development of the reports, the key issues within those reports, and the recommendations that they provide.

██████████ Attorney General has been informed of the topics but has had no role in determining the order or content of the topics. ██████████

Minister for Health and Social Services: The Panel's remit is to review the evidence and make recommendations for what services are provided, and it will be for the relevant myself and my colleagues to determine what services to provide and how we will proposed ██████████ be funded.

- 9) I would also like to state again that one of my biggest concerns regarding all of this is that you are still blending this into our main water supply, therefore topping up every bodies already high levels and supplying the rest of the island with a form of a poisonous chemical, surely you do not need a Scientific Panel to explain this to you and this should be of paramount importance to all states members, to put something in place to stop this.

Minister for the Environment, Deputy Renouf: The stream source used by Jersey Water at ██████████ and the boreholes in the Jersey Water well field in St Ouen's Bay remain out of service. They will only be used in exceptional situations (for example, severe drought) when Jersey Water are certain that water quality standards would be met.

Jersey Water continue to regularly monitor PFAS concentrations in streams, abstraction reservoirs, and the treated water from Augres and Handois works. This provides assurance ██████████ in treated water remains compliant with EU directive, UK ██████████

██████████
The hydrogeological survey work that is ongoing will test these areas and provide detailed understanding of the long-term risk posed by PFAS to these water sources.

- 10) Karen, you wanted communication to be really tight, I don't see it. Maybe having been let down so many times in the past is why I didn't leave with much hope, I know Karen, you said that you will assure us that you will do your best and that the communication side of this is very important to you, you offered that you would take the hit and hold a meeting with the residents that are concerned, please do not let us down. ██████████

Minister for Health and Social Services, Deputy Wilson: Yes, I am happy to meet with residents again to listen to their concerns and please do let me and my colleagues know how we can improve communications going forward.

- 11) Some people still have not had their blood test results, who is pulling all of this together?

Director of Public Health, Dr Peter Bradley: I am not aware that there are any Islanders who have not had their blood test results. There was a very small number of test results which were delayed because they had to be re-taken, but these have been completed and the results communicated to the GPs and Islanders. If you believe that this is not correct, please ask the Islanders to contact publichealth@gov.je as a matter of urgency and we will investigate, thank you.

- 12) I did include PFASPanel@gov.je and it returned saying that address unfound or unable to accept emails.

Director of Public Health, Dr Peter Bradley: Unfortunately, there has been a technical issue affecting some public mailboxes, and it took some time to be resolved. The mailbox [REDACTED] is now in operation. Please use PFASPanel@gov.je to contact the Panel, or publichealth@gov.je to contact Public Health [REDACTED]

We trust the above answers your questions. If you have follow-up questions, please reference which numbered question you are referring [REDACTED] to facilitate our response.

[REDACTED]
Yours sincerely,

Deputy Kristina Moore
Chief Minister

Deputy Karen Wilson
Minister for Health and Social Services

Deputy Jonathan Renouf
Minister for the Environment

Dr Peter Bradley
Director of Public Health

[REDACTED]
Panel Chair [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
To: [Jonathan Renouf](#)
Subject: FW: Response to Scrutiny
Date: 20 July 2023 16:30:16
Attachments: [image001.png](#)
[EHI Scrutiny Panel to Minister for the Environment - Quarterly Hearing Residual Questions - 22 June 2023 - final.docx](#)

Please see the below when you have a moment. Please confirm ok (or not)

Thanks

[REDACTED]

From: [REDACTED]
Sent: Friday, July 14, 2023 11:02 AM
To: Jonathan Renouf <J.Renouf4@gov.je>
Subject: FW: Response to Scrutiny

Hi Jonathan

Please can you confirm that you are ok with the answer to b) below – it was inadvertently missed when we responded to Scrutiny’s multitude of ‘residual questions’ the other week. The overall response we sent is attached above. The outstanding bit on discharges below could get picked up from the Scrutiny website so wanted you to be content with it. Scrutiny has not asked for an answer, but for completeness I thought I should seek one. Thanks [REDACTED]

b. What concerns, if any, do you have in relation to discharge of treated effluents and surface water discharges that are flowing into the sea?

Discharges to the water environment are regulated under the Water [REDACTED] Law 2000, whether specifically through permits or through the law creating an offence of causing or knowingly permitting [REDACTED] Surface water and diffuse [REDACTED] e.g. from agriculture or runoff from urban areas, cannot be directly regulated but monitoring is carried out to inform understanding and target work where possible.

The new replacement sewage works will improve the quality of the treated effluent entering St Aubin’s Bay (notwithstanding the June 2023 public health advisory against swimming in the bay and the investigation following STW performance issues). Effluent quality from the small treatment plant at Bonne Nuit remains stable.

The average nitrate data in streams across the island has reduced by just over one-third during the past 20 years. This downward trend will be replicated in surface water outfalls and is partly

the result of the work of the Action for Cleaner Water Group (a partnership approach between Government, Jersey Water and the agricultural industry).

The quality of these permitted discharges and surface waters is closely monitored as is the quality of receiving waters (including bathing waters). There is no indication of any long-term deterioration in St Aubin's Bay.

Improvements in the understanding of fate and behaviour of emerging contaminants (hazardous substances, pesticides, microplastics, PFAS etc.) and the developing ability to measure them will be drivers for both my regulatory and scientific monitoring teams ensuring we have good quality information to base decisions on into the future.

The impact of climate change on terrestrial and marine water quality and effluent discharges going into them are important considerations with more extreme and unpredictable weather events.

From: [REDACTED]@gov.je>
Sent: Friday, July 14, 2023 10:32 AM
To: [REDACTED]@gov.je>
Cc: [REDACTED]@gov.je>
Subject: FW: Response to Scrutiny

Thanks [REDACTED]
This reads well and there are no further changes from myself.
Tim

From: [REDACTED]@gov.je>
Sent: Monday, July 10, 2023 10:10 AM
To: [REDACTED]@gov.je>; [REDACTED]@gov.je>
Subject: FW: Response to Scrutiny

Hi [REDACTED] and [REDACTED]

Please can you confirm that you are content with the below as the answer to part b). Please note Scrutiny will publish this on its public website (alongside all the other answers).

Thanks for your help

Kind regards

[REDACTED]

From: [REDACTED]@gov.je>
Sent: Friday, July 7, 2023 6:57 PM
To: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]

[redacted]@gov.je>; [redacted]@gov.je>; [redacted]@gov.je>
Cc: [redacted]@gov.je>; [redacted]@gov.je>
Subject: RE: Response to Scrutiny

Apologies for the delayed response, suggestions below in one place and incorporating [redacted] suggestions with some tweaks.

Regards
[redacted]

b. What concerns, if any, do you have in relation to discharge of treated effluents and surface water discharges that are flowing into the sea?

Discharges to the water environment are regulated under the Water Pollution Law 2000, whether specifically through permits or through the law creating an offence of causing or knowingly permitting pollution. Surface water and diffuse pollution e.g. from agriculture or runoff from urban areas, cannot be directly regulated but monitoring is carried out to inform understanding, and target work where possible.

The new replacement sewage works will improve the quality of the treated effluent entering St Aubin's Bay, (notwithstanding the June 2023 public health advisory against swimming in the bay and the investigation following STW performance issues). Effluent quality from the small treatment plant at Bonne Nuit remains stable.

The average nitrate data in streams across the island has reduced by just over one-third during the past 20 years. This downward trend will be replicated in surface water outfalls and is partly the result of the work of the Action for Cleaner Water Group (a partnership approach between Government, Jersey Water and the agricultural industry).

The quality of these permitted discharges and surface waters are closely monitored as are the quality of receiving waters (including bathing waters). There is no indication of any long term deterioration in St Aubin's Bay.

- Improvements in the understanding of fate and behaviour of emerging contaminants (hazardous substances, pesticides, microplastics, PFAS etc.) and the developing ability to measure them will be drivers for both my regulatory and scientific monitoring teams ensuring we have good quality information to base decisions on into the future.

- The impact of Climate change on terrestrial and marine water quality and effluent discharges going into them are important considerations with more extreme and unpredictable weather events.

Regards

[redacted]
Regulation Standards Manager (Pollution Control)

Mobile [redacted]
Direct +44 (0)1534 [redacted] / Reception +44 (0)1534 445808

Government of Jersey
Infrastructure and Environment | Regulation



**Infrastructure
and Environment**

From: [REDACTED]@gov.je>

Sent: Friday, July 7, 2023 12:23 PM

To: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>; [REDACTED]@gov.je>

Cc: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>

Subject: RE: Response to Scrutiny

The first bullet is not in line with the Ministers current discussions about STW performance and St Aubin's bay ecoli results, but I am wary about adjusting that without input from others ([REDACTED] cc'd in). You may also wish to include a sentence along the lines of discharges are regulated under the WP(J)L by..... to reinforce that. I wouldn't bother mentioning Bonne Nuit unless the PC team feel it is worthwhile. The no long term deterioration bit is in the context of the WFD status of St Aubin's bay so I would suggest referring specifically to that rather than a really broad statement.

I would also add a couple of bullet points along the lines of:

- Improvements in the understanding of fate and behaviour of emerging contaminants (hazardous substances, pesticides, microplastics, PFAS etc.) and the developing ability to measure them will be drivers for both my regulatory and scientific monitoring teams ensuring we have good quality information to base decisions on into the future.
- The impact of Climate change on terrestrial and marine water quality and effluent discharges going into them are an important factor consider where we can with more extreme and unpredictable weather events.
-

Hope this helps

[REDACTED]

From: [REDACTED]@gov.je>

Sent: Thursday, July 6, 2023 5:33 PM

To: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>; [REDACTED]@gov.je>

Cc: [REDACTED]@gov.je>; [REDACTED]@gov.je>

Subject: RE: Response to Scrutiny

Please can review my short answer below please.

I would like to get back to [REDACTED] tomorrow.

Thanks

From: [REDACTED]@gov.je>
Sent: Thursday, July 6, 2023 2:53 PM
To: [REDACTED]@gov.je> [REDACTED]@gov.je>
Subject: Response to Scrutiny

Hi [REDACTED] and [REDACTED]

Please are you able to give me some words for part b) below. I have sent off the completed document to Scrutiny but it would be helpful if I could share something with them include something under b) for completeness.

Thanks for your help

Kind regards

[REDACTED]

8. **Minister, in the Bridging Liquid Waste Strategy reference is made to the Marine Spatial Plan that you will be developing and that *“this work will inform the policies of the next iteration of the Island Plan and support coordinated policy development and decision-making on all aspects affecting the marine environment”*.**

This is particularly with reference in the strategy to the potential impact that Liquid Waste can have on the marine environment.

- a. **Can you provide further detail as to how the Marine Spatial Plan will take into account the potential impact Liquid Waste can have on the marine environment and recommendations it will set out to protect Jersey’s marine environment?**

The MSP will cover water quality but as the Plan is in the process of being written, it is too early to say what recommendations may be included. However, as the MSP concerns management of processes that occur in coastal waters, and not on land, it seems likely that any recommendations will focus on monitoring systems in order to gauge the effectiveness of terrestrial management strategies and the potential effect on maritime ecosystems.

- b. **What concerns, if any, do you have in relation to discharge of treated effluents and surface water discharges that are flowing into the sea?**

The new replacement sewage works will improve the quality of the treated effluent entering St Aubin’s Bay. Effluent quality from the small treatment plant at Bonne Nuit remains stable.

The average nitrate data in streams across the island has reduced by just over one-third during the past 20 years. This downward trend will be replicated in surface water outfalls and is partly the result of the work of the Action for Cleaner Water Group (a partnership approach between Government, Jersey Water and the agricultural industry).

The quality of these discharges are closely monitored as are the quality of receiving waters. There is no indication of any long term deterioration.

1. The average level across all island streams in 2002 was **38 milligrams per litre** (mg/l)

2. This is **below the EU and local drinking water limits** of 50 mg/l

Nd hence

c. Can you outline for us how the Marine Spatial Plan will feed into or align with the Bridging Liquid Waste Strategy?

See answer (a) above.

[REDACTED]
Private Secretary to the Minister for the Environment

Tel 01534 [REDACTED]
e-mail [REDACTED]@gov.je

Government of Jersey
Department of Health and Community Services
19-21 Broad Street | St Helier | Jersey | JE2 3RR



Environment, Housing and Infrastructure Scrutiny Panel

Minister for the Environment

Quarterly Public Hearing - Wednesday 21st June 2023

Response to Residual Questions

Rented Dwellings

1. **Do you have any concerns that the proposed draft Regulations will place too much administrative burden on landlords that might make them consider selling their property and therefore reducing available property within the rental market?**

The administrative burden in terms of applying for a licence will be as light as possible with just a single online form to fill in. It will include automatic property lookups, payments online and an Excel document option for those landlords with large portfolios. The licence is then subject to renewal after two years. So, the “administrative burden” is a single online form once every two years. I find it implausible that this “burden” would trigger a landlord to sell. Indeed, I can’t help but note that the process of selling is significantly more of an “administrative burden”. If, however, the perceived burden is the anticipation of work that needs to be done to bring a dwelling up to minimum standards, then that is not a valid objection to the Regulations, because these minimum standards are already a requirement under the Law.

It may interest the Panel to know we have seen examples of landlords who have properties which don't meet these current legal requirements in respect of minimum standards and / or have prescribed hazards. In these circumstances, some landlords have chosen not to reinvest in their properties and put them on the market and subsequently new landlords have come forward to bring these into compliance.

Bridging Liquid Waste Strategy – Flooding and climate change

2. **Minister, we note in the Bridging Liquid Waste Strategy Proposal 34 taken from the Bridging Island Plan which states that you will work with the Minister for Infrastructure to “*further explore opportunities for the strategic management of inland flooding in the form of a Catchment Flood Management Plan (CFMP)*”.**
 - a. **Can you elaborate further on what solutions are being considered as part of the Catchment Flood Management Plan?**

Whilst a Catchment Flood Management Plan (CFMP) has yet to be developed, the [Jersey Strategic Flood Risk Assessment 2021](#) identified a range of strategic flood management options which could be used to help reduce the risk of inland flooding in Jersey. These included the development of flood storage areas; catchment and floodplain restoration; and the adoption of upstream natural catchment management methods. It should be noted that these options are

being considered as part of the solution in the catchment upstream of Grand Vaux, following Event Barn. In addition to these types of projects, the CFMP could also consider surface water separation, online and offline storage tanks and new surface water outfalls. As discussed in the Bridging Liquid Waste Strategy, keeping surface water out of the foul sewers frees up capacity and helps to keep sewage in the sewers during storm events.

b. Please can you specify the timeline for the publication of this plan?

The CFMP will be a combination of the Surface Water Management Plan (SWMP) being developed by the Minister for Infrastructure, the existing Jersey Shoreline Management Plan and the latest guidance and recommendations of the United Nations' Intergovernmental Panel on Climate Change. The CFMP will also have to be developed in conjunction with the proposed Marine Spatial Strategy as noted in the Bridging Island Plan (BIP) and Bridging Liquid Waste Strategy.

The SWMP will, for the first time, provide a set of flood risk maps for the Island and these will set the inland priorities for the CFMP while marine and coastal priorities will come from the other documents. The SWMP will be completed in 2023 and the BIP notes that the Marine Spatial Plan (Strategic Proposal 3) is to be developed before 2025 with the full CFMP developed in parallel.

Energy prices / energy efficiency

3. Assistant Minister, you mentioned in our last hearing that insulation schemes would be considered and might need to be adapted, can you update on this please?

Insulation and other energy efficiency improvements are a key part of the Low Carbon Heating incentive launched in May 2023 (see response to answer 4 below).

A valid Energy Performance Certificate (EPC) for the property is a prerequisite to apply for funding under this scheme.

Where the fossil fuel heating system is being replaced by a low carbon alternative, energy efficiency improvements identified on the EPC can be included within the grant-funded envelope. As a minimum, those applying for the grant funding are required to complete identified loft insulation improvements and easy wall insulation as part of the project, unless there is an acceptable reason why this work is not possible.

4. Reference was also made at the last Quarterly Hearing to the imminent launching of an Energy Incentive Scheme.

a. Please could you provide an update on the status of the launching of an Energy Incentive Scheme?

b. Can you outline what the Energy Incentive Scheme will consist of?

Our understanding is that the reference was to the Low Carbon Heating Incentive, the name of which was not confirmed at the time of the last Quarterly Hearing.

The Low Carbon Heating Incentive is one of the policies within the Carbon Neutral Roadmap (agreed by the States Assembly in April 2022).

The incentive was launched on 15th May 2023 and provides up to [REDACTED] of match funding, currently for domestic owner-occupiers to replace oil or gas boilers with low carbon heating systems. For those meeting the low-income eligibility criteria, [REDACTED] of funding is available without the need to match fund.

The current eligible low carbon technologies are: air sourced heat pumps, electric flow boilers and electric panel and storage radiators.

For those undergoing heating system changes, energy efficiency improvements can also be included within the funding envelope.

As per the answer to question 3 above, an Energy Performance Certificate is required of all properties applying for the incentive and energy efficiency improvements identified on the EPC can be included within the grant funding.

A Contractor Quality Scheme has been developed to ensure the provision of high-quality advice, heating system design and installation work from contractors. Only contractors that are members of the Contractor Quality Scheme can complete grant-funded work.

To clarify application figures provided by officers during the hearing, to date there have been 46 enquiries made to the Contractor Quality Scheme and 29 applications fully approved for the incentive funding. Five low carbon heating installations have been completed and the incentives paid.

In addition, policy officers continue to explore options around the provision of a wider reaching insulation and energy efficiency support offering.

Greenhouse gas emissions inventory

5. Jersey greenhouse gas emissions stats were published on the 25th April 2023. Transport remained the Island's largest emitting sector at 41%.

a. Could you detail what action you propose to take in 2023 and onwards to try and decrease the emissions from vehicles on the Island?

- We are introducing financial incentives to encourage the adoption of electric vehicles. This will also include home charging incentives to support low-cost charging for residents. Alongside this, we are working with Jersey Electricity to support development of the public charging infrastructure across the island to ensure convenient access to charging points for all Islanders. These incentives are going to run in parallel with the incentives to support Islanders to buy electric bikes, adapted bikes and cargo bikes in an effort to enable modal shift out of petrol and diesel cars and onto bikes for commuter journeys.

- We are committed to transitioning the government fleet to electric vehicles to lead by example. By replacing conventional vehicles with EVs, we can demonstrate the practicality and benefits of zero-emission transportation whilst collecting valuable data on how efficient EVs are across different types of vehicles to support better monitoring and evaluation.
- Regarding public transport, we are using Policy TR9 within the Carbon Neutral Roadmap to trial new and more frequent routes within the current summer timetable. This will help us to understand the areas where data and research tells us that where there is potential demand for use of the bus, people will switch their mode of transport. Through the current tender of the bus contract, we are using the outputs from the bus development plan workstreams to maximise the opportunity to decarbonise the future bus fleet from 2025 when the new contract is awarded. Currently, the double decker buses are decarbonised through the use of second-generation renewable diesel.
- We are working on Jersey's first Cycling and Walking Strategy which will draw conclusions on the active travel rapid plan and identify a strategic cycling network across the Island and a further four key walking zones, alongside a ten-year infrastructure action plan. There is currently a Government Plan 2024 bid in to fund this delivery. This strategy will promote modal shift and enable investment in the development of safe and accessible cycling and walking infrastructure throughout the island. By reallocating road space which prioritises cycling, improving pedestrian facilities, and ensuring proper connectivity, we can encourage residents to choose these sustainable options for shorter trips rather than private motor vehicles.
- As part of the Cycling and Walking Strategy and emerging Road Safety Strategy, we will be developing awareness campaigns to inform the public about the environmental and social impact of reducing private vehicle journeys and consequent emissions, whilst highlighting the benefits of more sustainable modes. By promoting eco-friendly practices and providing information on available incentives, we can encourage behavioural change and foster a culture of greener travel.
- We will continue to actively engage with local businesses, fleet operators, and delivery services to encourage the adoption of low-emission vehicles through our eco-active business network. Through this network we share best practice and facilitate partnerships, where lessons can be learnt and more positive decision making in the use of commercial electric vehicles is encouraged.

b. How is this information being factored into the Sustainable Transport Roadmap which is currently being drafted?

- The emerging Transport Strategy provides a more detailed update on all the actions which are in progress which support the decarbonisation of the Island's transport network. It provides policy direction, commitments and actions across six new themes and identifies the infrastructure projects which are being developed as well

as behavioural change programmes expected to be delivered within this term of government.

Common Population Policy Annual Report 2023

6. **Minister, on the 12th June 2023 the [Common Population Policy Annual Report 2023 R.100/2023](#) was published detailing the population policy for the Island.**

- a. **What concerns do you have with regards to the expected population growth on the Island and the impact this will have on the environment and our water resources?**

This a complex issue, and with respect can I suggest that it is tabled for discussion at the next quarterly meeting, where we can explore the issues in more detail.

- b. **What actions will be put in place to mitigate the strain an increased population on the Island would place on water resources, as well as the natural environment?**

Strategic Proposal 5 of the bridging Island Plan commits the Minister for the Environment, in discussion with other ministers including the Minister for Infrastructure and Minister for Economic Development, Tourism, Culture and Sport, to develop an infrastructure roadmap for Jersey. The roadmap will build on the [Infrastructure Capacity Study Report 2020](#) to inform short- and long-term strategic policymaking and help to understand the costs and consequences for the environment, economy and wider society of key future infrastructure choices.

Supporting the provision of infrastructure for the management of the island's water resources will form part of this work and is to be examined as part of the development of a Water Strategy for the island. The work on scoping the strategy has commenced and is a key Ministerial priority that will examine all current and future pressures on the resource (including population) and provide recommendations for future safeguards across areas such as water storage, use, conservation and recycling.

The impact of increasing population upon other aspects of the natural environment is managed through other policy tools, such as the Island Plan and a proposed biodiversity strategy.

Marine Spatial Plan

7. **Minister, we understand that work is underway on gathering information for the evidence base of the Marine Spatial Plan and [according to your timeline](#) from April to July 2023 the Marine Spatial Plan is being drafted and a draft map is being produced.**

- a. **Are you on schedule with this timeline?**

The MSP remains on schedule according to the timetable. A direction of travel document will be released shortly which will outline the Plan's contents and scope. Writing work for the main Plan document has begun and early drafts of some of the sections are with Marine Resources. The information required for the map is being prepared for publication. As things currently stand, the MSP is expected to be delivered on time and within budget.

- b. We note that there will be a second consultation process between September and October 2023. Could you indicate if you gained any learnings from the first consultation period that you will be applying to the second consultation period?**

The first round of consultations occurred in March and was to ensure that the MSP will be capturing all the issues and evidence (especially those in association with identified areas) that are of concern to the five key stakeholder groups. The consultation produced over 400 written comments and suggestions which cover a wide range of subjects and themes. Some themes/subjects were raised multiple times, while others were more specialised or targeted. We also received new datasets, other evidence (such as reports) and online comments. The first consultation is viewed as a success and to have achieved its objective.

All submissions have been considered in relation to the MSP's aims and objectives and have been used to inform the MSP's scope and design. In this respect, the key outcome of the first consultations was an understanding of the range and depth of issues which most concern key marine stakeholders in preparation for the MSP's design.

The autumn consultations will be on the content of the draft MSP and will be a much longer and broader process. These consultations will be open to the public and are likely to take place over several weeks to ensure that all marine users have the opportunity to comment on the draft plan before it is finalised for publication.

- 8. Minister, in the Bridging Liquid Waste Strategy reference is made to the Marine Spatial Plan that you will be developing and that *"this work will inform the policies of the next iteration of the Island Plan and support coordinated policy development and decision-making on all aspects affecting the marine environment"*.**

This is particularly with reference in the strategy to the potential impact that Liquid Waste can have on the marine environment.

- a. Can you provide further detail as to how the Marine Spatial Plan will take into account the potential impact Liquid Waste can have on the marine environment and recommendations it will set out to protect Jersey's marine environment?**

The MSP will cover water quality but as the Plan is in the process of being written, it is too early to say what recommendations may be included. However, as the MSP concerns management of processes that occur in coastal waters, and not on land, it seems likely that any recommendations will focus on monitoring systems in order to gauge the effectiveness of terrestrial management strategies and the potential effect on maritime ecosystems.

- b. What concerns, if any, do you have in relation to discharge of treated effluents and surface water discharges that are flowing into the sea?**
- c. Can you outline for us how the Marine Spatial Plan will feed into or align with the Bridging Liquid Waste Strategy?**

See answer (a) above.

Maritime laws consultation

- 9. Minister, we note that on the 1st of June 2023 the Government launched a public consultation offering Islanders their chance to have their say on proposed Maritime Law changes.**

- a. What in the way of discussions have you had with the Minister for Economic Development on this topic?**

The proposed Maritime Law changes and associated consultation are not managed by Marine Resources. This is because the consultation does not concern fishing or other regulations that fall within our remit. In this respect, we have not had any discussions with the Minister for Economic Development.

- b. One of the proposed alterations to maritime laws is the broadening of the definition of a 'vessel'. What impact, if any, do you see these law changes having on current fishing regulations?**

As Marine Resources understands it, the proposed amendments are primarily centred on enhancing safety and liability in connection with pleasure vessels which includes broadening the definition of a vessel to include smaller watercraft. As smaller watercraft are currently covered by Jersey's fishing regulations and the amendments do not concern the sea fisheries laws, it is not envisaged that there will be any impact in relation to current fishing regulations.

Areas of Special Protection at Les Minquiers

- 10. On the 1st February an order signed by yourself came into effect designating two areas of Les Minquiers as Areas of Special Protection under Jersey's Wildlife Law (2021).**

- a. Minister, as we approach summer, will you be ensuring that businesses operating boat trips or tours have access to guidance to ensure compliance with this Order?**

Consultation with businesses operating boat trips, as well as other recreation providers, started in September 2022 prior to the signing of the Order as part of the overall consultation.

The draft Order and the draft guidance explaining compliance with the Order was sent to all these parties inviting comment/feedback. A further email was sent in October 2022, as a reminder. As a result of this process, Natural Environment only received one point of clarification.

Further communications with the boat operators (including the above parties) took place with the Notice of Intention to Designate and then following the final designation. Guidance was attached to the final notice.

There was also a press release in January 2023 with reference to the guidance. This included a press release in France, with a French translation of the guidance being circulated.

The only feedback that Natural Environment received from businesses operating boat trips was a few acknowledgements of receipt.

Note: The law only requires consultation with 'owners or occupiers' of premises. However, consultation was extended to include the Société Jersiaise Ornithology Section, Ports of Jersey and commercial RIB operators and providers of recreation. The French authorities and French boat marinas were also notified of the Order.

b. Have any marine businesses raised concern around the rules now in place and/or lack of guidance?

No - as above. The only communication we received back during the consultation was regarding a point of clarity. As stated above, all operators were forwarded draft and final copies of the guidance well in advance.

c. How do you intend to monitor/measure the impact, both positive (for the environment) and negative (tourism/commercial) of these Areas of Special Protection?

The success of the ASP in relation to the breeding success of all migrant seabirds will be monitored by department officers and local bird experts.

At the end of the 2022 Ecrehous ASP season, Natural Environment officers wrote to the businesses operating boat trips thanking them for their cooperation and inviting feedback. Officers received no comments. This process will be repeated this year for both Les Ecrehous and the Minquiers as part of ongoing collaboration and monitoring.

The impact on tourism is likely to be small, being that one of the areas designated (Les Maisons) is not often frequented (it being a rocky outcrop) and the designated area on the main island is inhabited by breeding terns that can be aggressive if approached. The fact that terns are being safeguarded and able to breed and that any tourists can view the colony from a safe distance, would I believe, add to the special nature of this Ramsar Site and tourism potential.

Water Quality / Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)

11. Minister, can you update us on any progress made by the Natural Environment team in carrying out a study of surface and ground water in St Ouen's Bay and the Pont Marquet area of St. Brelade?

The Officer Technical Group continue to meet monthly. This comprises officers from Natural Environment (LRM), Health and Jersey Water.

Report on phase 1 of the hydrogeological survey has been completed. The work collated and assessed all available PFAS water quality data from both the above catchments, including data from the sampling sites, equipment and potential linkages.

As expected, the report identified the need for a detailed programme of monitoring of 60 sites that will commence across both catchments in early July 2023. These sites include groundwater (boreholes/wells) and surface water.

Alongside the actual sampling, detailed measurements of the borehole/well/stream and equipment will also be taken to determine sampling aquifer/depths and any sampling issues etc. The new sampling sites include new boreholes on the SSI in St Ouen's Bay to determine future risk to the Jersey Water well-field. These boreholes require planning permission which is currently being sought.

The monitoring will be undertaken quarterly over the next 12 months and will inform a model that will provide a better understanding of the size, movement, linkages and risk posed by the two plumes in St Ouen's Bay and Pont Marquet. It will also assess any potential mitigation of PFAS that might be possible.

A PFAS web page has been developed. This brings all information (environmental and health related) in one place.

Planning and Building (Amendment No.8) (Jersey) Law 202- Orders

12. We recently received a private briefing with regards to Planning and Building Orders regarding the protection of trees in Jersey.

a. Can you provide an update on the consultation you are having with industry on these orders and what feedback has been received to date?

The consultation was active for 8 weeks and 492 responses were received. In addition, meetings were held with tree surgeons, landscape gardeners and non-government organisations.

Responses to the consultation have been analysed and, as a consequence, minor amendments are being made to the policy and to the draft Orders. These changes are intended to allow most (although not all) routine tree work in domestic gardens without recourse to the notification or planning regimes and to introduce the option of 'woodland management plans' for those landowners with significant areas or numbers of trees.

13. We were surprised to learn that the Jersey Tree Map is not yet available in the public domain, can you advise when the map will be published and the reason(s) for it not yet being published?

The Jersey Tree map was developed from LIDAR (Light Detection and Ranging) survey data and high-resolution specialist aerial photography to develop a baseline data set of trees in the Island. Whilst broadly accurate, there are inevitable 'uncertainties' around such mapping (such as the misidentification of some objects, such as pylons and maize plants, as trees) and officers are keen that these are better understood before the map is released into the public domain.

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]; [Kristina Moore](#); [Jonathan Renouf](#)
Subject: RE: PFAS Concerns / Farmers, Fields & Contaminated Water
Date: 06 December 2023 17:36:15

Thank you [REDACTED]

Just for clarity, when you mention the date of 18 Dec and getting a result to you, this was referring to the usual closing down date of UK Labs for the Christmas period.

So we need to get samples to them well before this date for them to be processed and the team are working towards this.

Before we do this, they need to courier across PFAS free sampling containers etc. which generally takes a week- so time is tight but we are pushing ahead.

From: [REDACTED]
Sent: Tuesday, December 5, 2023 5:15 PM
To: [REDACTED]@gov.je>
Cc: [REDACTED]
[REDACTED] Kristina Moore
<K.Moore2@gov.je>; Jonathan Renouf <J.Renouf4@gov.je>
Subject: Re: PFAS Concerns / Farmers, Fields & Contaminated Water

You don't often get email from [REDACTED] [Learn why this is important](#)

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi [REDACTED]

Thank you for getting back to us, look forward to hearing from you and your teams.

Kind regards

Sent from [Outlook for iOS](#)

From: [REDACTED]@gov.je>
Sent: Tuesday, December 5, 2023 5:03:49 PM
To: [REDACTED]>
Cc: [REDACTED]
[REDACTED] Kristina Moore <[K.Moore2@gov.je](#)>; Jonathan Renouf
<[J.Renouf4@gov.je](#)>
Subject: RE: PFAS Concerns / Farmers, Fields & Contaminated Water

Hi [REDACTED]

It was useful to talk through this with you at the recent PFAS public meeting.

I understand all your concerns and pressures and am pushing forward with the sampling programme for potatoes and soil with my colleagues from the food team at Environment and Consumer Protection.

As you are aware, this is on the front end of developing PFAS science and we are fortunate to be able to draw on the latest understanding from the Expert Advisory Panel.

I will keep both yourself and the growers updated.

[REDACTED]

From: [REDACTED]
Sent: Monday, December 4, 2023 3:04 PM
To: [REDACTED] <[\[REDACTED\]@gov.je](mailto:[REDACTED]@gov.je)>; [REDACTED]
[REDACTED]
[REDACTED] Kristina Moore <K.Moore2@gov.je>; Jonathan Renouf <J.Renouf4@gov.je>
Subject: PFAS Concerns / Farmers, Fields & Contaminated Water

Some people who received this message don't often get email from [REDACTED] [Learn why this is important](#)

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear [REDACTED] Kristina & Jonathan.

Thank you very much for attending the PFAS meeting on Friday 1st December and to Tim & Kristina for taking the time to talk to myself and [REDACTED] regarding the use of [REDACTED] in the St Ouen's Bay area.

As you are aware there is now huge concern from the farmers and [REDACTED] the land owners along with others for the use of fields to be able to continue to grow potatoes, whilst irrigating from the surrounding areas, for the upcoming season that is due to start early January 2024.

You mentioned that the PFAS panel that has been put in place by the government was looking into information regarding this along with tests being performed, I would be grateful if you would be able to keep us all informed of what is being done along with what progress is being made.

I'm sure you will appreciate the importance of us all being kept informed as to if we can use these fields and the surrounding water sources to be able to continue the 5th generations of farming in the area, you mentioned you would hopefully get a reply to us all before the 18th of December 2023, this would be gratefully received as we all need to know where we stand.

As you will see, with permission I have copied in all those of concern, please reply

to all so we can be informed of any changes.

I look forward to hearing from you in the very near future.

Kind regards

[Redacted]

For and on behalf of

[Redacted]

Care : If you have received this email and it was not intended for you, please reply to the sender, and then delete it. Please treat our information in confidence. This communication may contain legal advice which is confidential and/or privileged. It should not be forwarded or copied to anyone else without the prior permission of the sender.

Contract : This email does not form any binding agreement unless it is supported by an official States of Jersey purchase order form.

Content : All States information systems may be monitored to ensure that they are operating correctly. Furthermore, the content of emails and other data on these systems may be examined, in exceptional circumstances, for the purpose of investigating or detecting any unauthorised use. This email has been scanned for viruses by the States of Jersey email gateway.

Confidentiality and Privacy : The confidentiality of this e-mail and your reply cannot be guaranteed. As a public authority, the States of Jersey is subject to the provisions of the Freedom of Information (Jersey) Law 2011. Under this Law we may be required to disclose information we hold, including the contents of this email and any response to it, unless the information is protected from disclosure by an exemption under the Law or any other enactment, including the Data Protection (Jersey) Law 2018. We collect and process personal information about you under the Data Protection (Jersey) Law 2018. For more information on how we use your data please go to our privacy statement pages on www.gov.je.

From:

To:

Cc:

[Jonathan Renouf](#); [Kristina Moore](#); [REDACTED]

Subject:

RE: PFAS Concerns / Farmers, Fields & Contaminated Water

Date:

27 December 2023 11:02:40

Dear [REDACTED]

As an update, Health colleagues have received the lab. results from the testing of potatoes and soil. I have passed these to the PFAS Scientific Advisory Panel for comment.

These included results from raw and cooked potatoes and soil from the plume/irrigated fields and controls from in St Ouen's Bay and Grouville.

[REDACTED]

From: [REDACTED]
To: [Jonathan Renouf](#)
Cc: [REDACTED]
Subject: FW: For sign off - Draft minutes of the PFAS event 1 December
Date: 15 January 2024 16:09:43
Attachments: [image001.png](#)
[image002.png](#)
[DRAFT notes - PFAS event with Ministers 1 Dec 2023 at the Atlantic.docx](#)

Good afternoon Jonathan,

Please find attached the notes from the PFAS meeting with Islanders in December.

They are looking for sign off by 25 January, so end of next week, so can be looked at the end of the week once the States is out of the way.

Kind regards,

[REDACTED]

Research and Administration Officer

Government of Jersey
Ministerial Offices | Office of the Chief Executive
19-21 Broad Street | St Helier | Jersey | JE2 3RR



From: [REDACTED]@gov.je>
Sent: Monday, January 15, 2024 3:54 PM
To: [REDACTED]@gov.je>; [REDACTED]@gov.je>; [REDACTED]
[REDACTED]@gov.je>
Subject: For sign off - Draft minutes of the PFAS event 1 December

Hi [REDACTED],

Please can you help regarding the attached notes from the Ministerial event with Islanders on PFAS in December?

Could you please ensure that MEnv and MHSS are sighted on these and CM is content to sign off prior to them being made public. It is our intention to send out the next PFAS newsletter to Islanders at the end of January, therefore if we can get sign off by **25 January**, that would be most appreciated.

If there are any amends please do let me know, with thanks in advance for your help.

Kind regards

[REDACTED]



Senior Policy Officer (contractor)

Public Health Jersey

Cabinet Office

19-21 Broad Street | St Helier | Jersey | JE2 3RR



Draft Minutes - PFAS Meeting: Report 1 Launch & Government Response

Friday 1 December 2023, 5:30pm - 7:30pm at the Atlantic hotel

Attendees

Members of the public were joined by:

- Chief Minister, Deputy Moore
- Minister for Health and Social Services, Deputy Wilson
- Minister for the Environment, Deputy Renouf
- [REDACTED], Independent Chair, PFAS Scientific Advisory Panel

Along with Government officers: Professor Peter Bradley, Director of Public Health and Medical Officer for Health, Grace Norman, Deputy Director of Public Health, Dr Tim du Feu, Head of Land Resource Management, plus support staff.

Meeting notes

[REDACTED] introduced the meeting and Ministers, guests and officers present were introduced.

The purpose of the meeting:

- To summarise the Panel's recommendations on the potential for a therapeutic phlebotomy service
- Inform Islanders of the Government's response to the recommendations
- An opportunity for Islander input and questions with Ministers

Grace Norman recapped on the PFAS Panel membership and scope of their work.

The slides presented at the meeting can be found here [Government of Jersey Presentation PFAS meeting 1 Dec.pdf](#)

Report 1: Interim report into the potential for a therapeutic phlebotomy service

An overview was given on the Panel recommendations which were that Government offer a programme of therapeutic phlebotomy as an interim measure pending detailed review of health effects & effectiveness of alternative interventions.

Eligibility criteria:

- Participated in the blood testing programme in 2022 with PFAS results of at least 10 nanograms per millilitre and until levels reach median background levels
- Aged between 18 and 65 who weigh at least 50 kg; outside of this by clinical judgement
- Not known to be pregnant

Full report available [First Report of the Independent PFAS Scientific Advisory Panel for Jersey \(gov.je\)](#)

Government response

The Government accept the Panel's recommendations and ask that a service is made available in line with the Panel's recommendations.

Service eligibility

The Panel's eligibility recommendation is for people who participated in the blood testing programme in 2022 with PFAS results of at least 10 nanograms per millilitre and until levels reach median background levels.

The decision from Ministers was as above and additionally, anyone from the 2022 testing programme with a result of 8-10 nanograms per millilitre can be re-tested. If results are 10 or greater, they can be considered for the service.

Service specification

Outline service development has begun, and funding has been identified. There will be a clinical service, specialist PFAS blood testing using labs off-Island, plus data monitoring and service evaluation.

Service design

Grace Norman outlined that, to the best of her knowledge, this will be the first time that a therapeutic phlebotomy service has been set up as an intervention for PFAS body burden, rather than in the context of an experimental study. Islanders are invited to participate in service design to make sure that it is fit for purpose.

A rough temperature check was asked of the room to indicate if they were interested in a therapeutic phlebotomy service and people were asked to leave feedback slips after the meeting and provide contact details if they were interested to find out more about contributing to the service design. People were asked to email any comments on service design to publichealth@gov.je by 12 January.

Questions and answers

Question: In report 3, if evidence comes to light for a better intervention, how would people be impacted if they had already agreed to start therapeutic phlebotomy? There are also other potential medications which people may choose to try which have not been assessed.

- [REDACTED] replied that report 1 was an interim measure and that the Panel will look at other interventions as part of report 3, including consideration of plasmapheresis and medications. If someone has therapeutic phlebotomy, they should see a reduction in PFAS body burden. If their body burden is lower after therapeutic phlebotomy, then they may not need other interventions.

- If someone had PFAS blood levels in the eligible range for alternative interventions in the future, they would not be excluded from such services because of having previously participated in therapeutic phlebotomy.

Question: How easily could you switch from delivering a therapeutic phlebotomy service to a plasmapheresis service?

- It is expected that there would be a longer lead time in setting up another service compared to therapeutic phlebotomy. [REDACTED] explained that [REDACTED] couldn't see a clinical reason why a person couldn't have therapeutic phlebotomy and then have another intervention later if they were eligible based on PFAS results.

Question: The Australian trial had 3 intervention groups [donation of whole blood, donation of blood plasma, and a control]. PFHxS is of particular concern in Jersey; if you look at Australian research there was a difference between the blood donation group and plasma group for PFHxS, with better outcomes seemingly from plasma rather than phlebotomy.

- [REDACTED] mentioned that it may be better, but there may be many reasons for this, including that participants were giving plasma more frequently than whole blood. The Australian study was small and there were some limitations with the study. The Panel also has to be realistic about what can be delivered in Jersey and there are additional challenges with plasma donation in comparison to phlebotomy, and additionally there are additional side effects also.

Question: An Islander commented on the Canadian study on a family which was a small number of people. (Genuis et al [Phlebotomy Treatment for Elimination of Perfluoroalkyl Acids in a Highly Exposed Family: A Retrospective Case-Series - PMC \(nih.gov\)](#))

- [REDACTED] reiterated that the Panel are recommending therapeutic phlebotomy as an interim service because its quicker to get up and running and people can have a service as quickly as possible.

Question: If there is no evidence that PFAS causes ill health, why are we doing this?

- [REDACTED] explained that there are methodological difficulties in establishing whether a chemical in the environment has an impact on health. [REDACTED] gave an example to illustrate his point. With cyanide it is easy to make the health impact connection as cyanide affects you straight away and has the same outcome on everyone. However, if the chemical in question is one that affects people on a longer time frame or affects some people differently from others, it can be more difficult to see the health impacts. Consequently, the link between PFAS and health outcomes is difficult to measure.

- The Panel are looking at the best available evidence and making a judgement on whether something should be done or take a precaution, or to say that the Panel can't find enough proof for an intervention.

Question: The Panel said they will look at whether PFAS causes cancer, which box ('it does', 'it may do', or 'it doesn't') does the new report fall into? (*This question makes reference to Carcinogenicity of perfluorooctanoic acid and perfluorooctanesulfonic acid which was published that day.* [Volume 135: Perfluorooctanoic acid and perfluorooctanesulfonic acid – IARC Monographs on the Identification of Carcinogenic Hazards to Humans \(who.int\)](#))

- [REDACTED] commented that [REDACTED] had not yet read the full report in detail, but this could fall in the middle for most PFAS types. [REDACTED] from the PFAS Panel can speak in more authority on the paper on cancer.

Question: Is there an age limit for access to the service, and will we be retested for PFAS before therapeutic phlebotomy is performed?

- [REDACTED] commented that when you donate blood there is only a benefit to others, not to you, therefore strict limits are imposed. With therapeutic phlebotomy there are benefits to the individual involved, so any risks can be offset by the benefits to the person, so for this process you could use clinical judgement. The Panel are not making strict recommendations about eligibility based on weight or age. If someone wishes to take up the service, the doctor leading the service and the individual will work together to assess whether this is the right service for the person.
- Anyone who wants to take part in the programme will have another PFAS blood test before the start the programme to assess their levels at that time, and further tests will be taken during the programme to monitor levels over time.

A further Question regarding the age limit for eligibility to access the service.

- [REDACTED] said we need to be clear on how clinical judgement is made. The Panel recommended that many of the criteria were left to clinical judgement, except pregnancy.

Question: Ministers, can our health services cope with this, as they are already under pressure?

- The Minister for Health and Social Services (MHSS) said that this would depend on how many people need the service. There is an opportunity to work with Islanders to help design the service. We don't know the scale and scope at the moment so we can work out together how to deliver it.

Comment: Islanders feel they are being exposed on a daily basis.

- [REDACTED] commented that there is no way to totally remove exposure and will look at the environment in report 4.

Comment: Retest all 88 to see if PFAS levels have increased.

- [REDACTED] commented that in report 3 the Panel are looking at testing and retesting.

Question: How will you know background levels?

- [REDACTED] said that the Panel had recommended in the report to find out the background levels and have made suggestions on how to do it, noting that the Panel are not experts on how health services work in Jersey. How and when to do it will be left to Jersey Government, although it is understood that this could be challenging.

Question: Can we speak to a doctor or nurse regarding the phlebotomy service, it is a big decision, and we want to know health effects and side effects and if it will impact on our health?

- [REDACTED] said that the decision to use the service will be between individual and the clinical staff. There will be a pre-service assessment and people can have that discussion with clinical staff.
- [REDACTED] said the Panel are looking at what clinical staff need to know to help their patients with PFAS exposure in Report 2. To note that for general information on general phlebotomy there is a chapter in report 1 which looks at risks. People can read this and see if this also helps to provide information.

Comment: An Islander mentioned that the Panel had previously commented on there being conclusive evidence for the impacts of PFAS on health in animals but not for humans.

- [REDACTED] said that researchers use animal studies to identify areas that need research in humans and for the identification of risk, but there is not always a match between animal outcomes and human outcomes. If there are a lot of consequences for animals, researchers take this into account when they decide what to investigate with humans.

Comment: People want to understand know about cancer and hear about this new report. (*Carcinogenicity of perfluorooctanoic acid and perfluorooctanesulfonic acid* [Carcinogenicity of perfluorooctanoic acid and perfluorooctanesulfonic acid - The Lancet Oncology](#))

- [REDACTED] will ask [REDACTED], who is the Health Panel member in Jersey, and also one of the invited specialists for the European cancer panel, to give an overview of what the cancer report said at next week's Panel meeting on 7 December.

General question and answers

Question: Regarding issues with the land. Is it ok for farmers to keep growing on our land without repercussions?

- The Environment Minister referred to the fact that milk and potatoes were tested in 2019 and PFOS was not found in detectable levels in these. Officers are now exploring further analysis of potatoes and soil in a UK lab and will share results when known.

Question: Landowners have been told that there are issues about their liability. PFAS causes concerns and will there be issues from farmers in the future?

- Tim du Feu commented that analysing soil and plants and their impact is an emerging science, noting that there are now accredited labs in the UK. The PFAS Panel have been asked to help review the available evidence and information on a specific question about potatoes. There have been a number of studies on plants and how they absorb different PFAS.
- [REDACTED] said the Panel will look at these issues in report 4 and Panel are looking into it briefly now due to the question about potatoes.

Question: Concerns about PFAS levels in the sea and the impact on fish and crustaceans. Are these being tested for PFAS?

- [REDACTED] said the Panel will consider the need to assess PFAS in fish and crustaceans in report 4 and will make recommendations as appropriate. [REDACTED] noted that PFAS in the sea is an international issue, rather than just a local issue.

Comment: An Islander expressed concern around the level of environmental contamination.

- [REDACTED] commented on the previous testing of biota; results showed low detection of PFAS both for marine life close to the sewage treatment works (in St Aubin's bay) and from St Ouen's Bay. There is ongoing water testing in Pont Marquet and St Ouens. Arcadis will produce a report with the results of their water testing and modelling work on the St Ouen's Bay and Pont Marquet plumes as part of the hydrogeological survey.
- The Chief Minister said thanks to the Panel we are considering these aspects. We are at the forefront and leading globally on some of this work. We will review the evidence and see how to proceed.
- The Chief Minister also appreciated people's frustration on the time it has taken to get to this point.

Question: Regarding water testing for the hydrogeological survey, should it be a third party collecting the water for testing to remove the risk of bias in sample collection.

- [REDACTED] explained that it is the Government of Jersey Natural Environment team who are collecting water samples, rather than Jersey Water, and it is appropriate that the environment team be involved in this work.
- Officers went out to tender to design the work and the company selected who are overseeing this work - Arcadis - are experienced in PFAS and have done work in Guernsey and across the globe.
- Sampling techniques are now highly advanced, they use medical grade pumps and PFAS free tubes to avoid any risk of contamination of samples.

Comment: An Islander asked whether people are happy they have PFAS in their blood. They wanted to show the strength of feeling in the room. [REDACTED] asked people in the room to raise their hands.

Question: Why did it take until 2005 for Government to tell Islanders to stop drinking water, when government knew of the potential harms many years earlier? The PFAS manufacturer had said the foam was dangerous. Why will government not be honest?

- The Chief Minister commented that the current Ministers were not involved at that time and have not seen the information that the Islander is referring to.

Question: The settlement with the States of Jersey, some of this documentation could be seen in States Greffe. Why can't we see all this information? Chemical companies told the States untruths in this settlement. The Islander referred to examples in other countries. We understood the States had to report any legal claims to the manufacturer and is this true?

- The Chief Minister said she and her Ministers are not aware of the contents of the document described, have not seen it and cannot comment.

Question: Is the Attorney General in contact with the PFAS manufacturer? Trust in government is low.

- The Chief Minister did not know and said they would endeavour to provide some information.
- [REDACTED] confirmed that the PFAS Panel is not communicating with any PFAS manufacturers.

Comment: I can't have my [REDACTED] round to visit due to PFOS in the bore hole and garden.

- [REDACTED] commented that this household is included in the Arcadis study sampling programme, and the data received will then be assessed to provide further information.

Comment: The memorandum for the Ports of Jersey says that they are responsible for mains water but no responsibility for health.

- That is correct.

Question: Are the Ports no longer part of the States?

- The Chief Minister confirmed that the Ports is an arm's length body to have more independence but are still owned by the Government of Jersey.

Comment: An Islander was upset about the PFAS in their blood.

- The Chief Minister said she could see the level of anxiety in people and understood that this is really challenging for people.

Question: Why is Jersey following the Drinking Water Inspectorate levels for mains water? These are for England and Wales, and the US recently dropped their levels. Water pumped into the reservoir from the plume was at a higher level to dilute it. Significant difference in what they want in US and what the levels are here. PFAS accumulates in pipework.

- [REDACTED] commented that the EPA – Environmental Protection Agency - in the USA have said it is a *strategic intent* to lower the threshold and this is not yet enforced. The Panel's report 2 will explore where PFAS accumulates in body and report 4 will look at where it accumulates in environment.
- Tim du Feu commented that the 2 bore holes in the plume area are now closed and are not in use.

Question: Reverse osmosis filters are used at the desalination plant; how are the waste filters disposed of?

- This would be a question for waste management.
- [REDACTED] mentioned the Panel could look at this in report 4.

Closing remarks

Ministers recognised the level of anxiety and stress amongst those present and appreciate that this is a challenging time for many involved.

The Chief Minister said that she hoped to have answered Islanders questions and anything outstanding can be picked up at the next meeting. The PFAS Panel have more work to do, and Ministers look forward to receiving their future reports.

The Chief Minister asked Islanders if they were happy with the choice of venue, as none of the community venues were available. The response was yes people were happy with the venue.

Islanders were thanked for their input and attendance. The government officers were also thanked for their work in supporting this work and organising the event.

The meeting was then closed.