Infrastructure and Environment

PFAS Islander Meeting Minutes

11th February 2025
18:00hrs

Government of Jersey

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1. WELCOME AND INTRODUCTIONS

Chair: Dr Steve Hajioff (Chair, PFAS Scientific Advisory Panel)
Opening Remarks: Kelly Whitehead (Group Director of Regulation at Government of Jersey)

1.1 Introduction by Kelly Whitehead

- Kelly Whitehead welcomed attendees and outlined the purpose of the meeting.
- She provided an update on ongoing regulatory efforts to coordinate work related to PFAS.
- Emphasised that the current focus is on environmental aspects of PFAS contamination.
- Stated that the meeting aimed to gather feedback on the scope of the next PFAS report.

1.2 Housekeeping and Meeting Materials

- Attendees were provided with a handout pack, which included:
    - A feedback form to gather input on how information should be presented, meeting frequency, and engagement preferences.
    - A proposed scope for Report 4 for public review and comment.
    - A Q&A document compiling questions raised since the November meeting, with ongoing updates planned.
- It was noted that the Q&A document will be a live resource, continually updated and eventually published online for transparency. Feedback on its format and usefulness was welcomed.
- Upcoming meeting dates included:
    - The next online PFAS Public Meeting (date to be confirmed).
    - The next Ministerial Meeting, expected in early March (confirmation to follow via email).
    - Report 3 is targeted for publication in early April. Attendees will be notified once dates are finalised.

2. PRESENTATION BY DR STEVE HAJIOFF

2.1 Background and Role of the Panel

- Dr Steve Hajioff introduced himself, explaining his background as a medical doctor and epidemiologist. While not specifically trained in PFAS prior to taking on this role, his expertise lies in evaluating scientific evidence and supporting policymakers in making science-based decisions.
- He introduced the two other members of the panel (not in attendance), Professor Ian Cousins and Dr Tony Fletcher, highlighting their credentials as established international PFAS experts.

2.2 Purpose and Scope of the Panel's Work

- The panel's primary role is to coordinate scientific research and provide an evidence-based decision-making framework for policymakers.
- The panel has been operating for 18 months, with an initial plan to produce five reports:
    - Report 1: Interim report on phlebotomy.
    - Report 2: Impact of PFAS on human health (published a few months ago).

- Report 3: Strategies for reducing PFAS levels in the body and testing methods (recently completed, due for feedback in April).
- Report 4: Environmental impact of PFAS, expected to be as significant as all previous reports combined.
- Report 5: Originally planned to assess advancements in PFAS science. Dr Hajioff suggested delaying this by one to two years, as scientific progress in this area has been slower than anticipated. He assured attendees that the panel will continue monitoring developments.

2.3 Approach and Methodology

- The panel operates on an evidence-based approach, led by scientific consensus. To date, all decisions have been unanimous, with no need for majority votes.
- Two key groups of expertise are considered:
  - Experts by experience: Individuals affected by PFAS whose personal experiences may not yet be reflected in scientific literature. The panel has taken these experiences into account when shaping their research priorities.
  - Subject Matter Experts (SMEs): International experts who contribute technical knowledge on PFAS-related issues.

2.4 Transparency and Public Engagement

- The majority of the panel's work is conducted in public forums, with limited private discussions, primarily regarding individual clinical cases. Any such discussions are included, but anonymised in published reports.
- Public engagement is encouraged, and attendees were directed to the panel's mailbox for questions or concerns.
- Dr Hajioff emphasised that the panel's role is to improve understanding and decision-making processes related to PFAS.

3. REPORT DEVELOPMENT PROCESS

3.1 Approach to Report Development

- The panel begins by identifying the key areas that need to be covered in a report. They then draft an outline, including proposed chapter headings, which are shared with the public for feedback—such as in this meeting.
- Attendees were invited to ask questions throughout the session, though a formal Q&A was scheduled at the end.
- The panel conducts a thorough review of all available scientific literature, critically analysing the data rather than accepting conclusions at face value.
- Dr Hajioff noted that, in many cases, published research papers suggest conclusions that do not align with the underlying data. A critical approach to literature review is therefore essential. This methodology (which is standard scientific method) was outlined in Report 2.
- Once the research is reviewed, a draft report is written. Dr Hajioff takes the lead on editing before sharing it with commissioners to ensure clarity and accuracy.

- He emphasised that no requests have ever been made to suppress findings—only to improve clarity. If suppression were ever attempted, the panel would not comply.
- A key focus of the reports is to communicate complex scientific concepts in a way that is accessible to the public.
- The final draft is then shared for further feedback, with meetings such as the one planned for April providing an opportunity for public input before recommendations are submitted to the Government.

3.2 Sources of Evidence

The panel will draw on three primary sources of evidence:

- Scientific literature review
- Testimonies from individuals with lived experience or specific expertise
- Environmental data analysis

3.3 Scope of the Upcoming Environmental Report

- The management of mains water will be an early focus of the next report. While the remainder of the report is still in development, interim guidance will be provided.
- Dr Hajioff noted that the order of topics in the presentation does not indicate their relative importance—rather, it is structured to build understanding logically.
- The report will begin by setting the scene, outlining the types of PFAS used in Jersey and how this differs from other regions. Understanding these differences is key to assessing how PFAS enters the body.
- A summary of key human health impacts will be included to ensure that each report can be understood independently, even if readers have not engaged with previous reports.
- Results from the hydrogeological survey and other environmental data will be available soon and will contribute to the evidence base.
- A previous recommendation from Report 1—assessing background levels of PFAS in islanders' bodies—remains relevant, as establishing a baseline is critical.
- The panel will examine PFAS exposure pathways, such as contamination levels in water and food sources, to estimate likely PFAS levels in blood and assess what levels might be considered acceptable.

4. AUDIENCE QUESTIONS AND DISCUSSION

While a designated Q&A session was scheduled for later in the meeting, attendees raised questions throughout the presentation. The following summarises key discussions.

4.1 Source and Movement of PFAS in Water

- **An attendee asked for clarification on what PFAS is and where it comes from, stating that they were unaware of it until recently.**
    - Dr Hajioff explained that the primary source of PFAS exposure varies depending on location, but in Jersey, water is likely a key factor.

- **The attendee asked if it was fair to say that PFAS contamination "flows from water."**
    - Dr Hajioff responded that this cannot be assumed universally, as contamination pathways differ across regions. He emphasised the need to rely on hydrogeological survey data, which will provide further insights.

4.2 Understanding the Plume and Wider Contamination

- **A long-term resident questioned whether the Government's focus on the Plume was misleading, suggesting that PFAS contamination may be more widespread.**
- **The attendee referenced discussions with numerous individuals who believe the entire water table is affected rather than just the Plume area.**
    - Dr Hajioff stated that current data does not support this conclusion but acknowledged that the upcoming hydrogeological survey will provide a clearer picture.

4.3 Assessing the Extent of the Plume

- **A question was raised about how the Plume is being defined and whether comparisons could be drawn with cases in Australia and North Carolina, where PFAS has impacted river water.**
    - Dr Hajioff explained that exposure pathways vary significantly depending on the size of the discharge and groundwater movement.
    - He reiterated that the panel is not making assumptions about whether water is the main source of exposure, as further data is required.

4.4 Scientific Studies and Cancer Risks

- **An attendee referenced a study from Southern California that examined PFAS exposure in "hot spots" and suggested an increased cancer risk ranging from 2% to 33%.**
- **They asked whether Dr Hajioff had read this specific study.**
    - He responded that he has reviewed thousands of papers but could not confirm familiarity with that particular one.
- **The attendee also suggested that scientists in England and Australia disagree with the panel's findings.**
    - Dr Hajioff responded that the study in question aligns with the panel's conclusions.
- A discussion followed regarding the use of animal studies in toxicology and whether the findings from such studies were more important than epidemiological studies.
    - Dr Hajioff explained that different species metabolise chemicals differently. He gave the example that penicillin is toxic to guinea pigs but safe for humans, illustrating the limitations of extrapolating animal data directly to people. Animal toxicological studies can tell us where to look, but epidemiological studies give us the best answers on questions of risk to humans.

4.5 Comparisons with Guernsey

- **An attendee asked about how Guernsey has managed PFAS contamination differently from Jersey.**
- **They stated that Guernsey had removed contaminants more effectively and questioned why Jersey did not build two new water treatment plants as recommended.**
- **They also suggested that the Government's focus on the Plume area was convenient, while broader impacts were being overlooked.**
    - Dr Hajioff acknowledged the importance of learning from other jurisdictions while noting that direct comparisons may not always be applicable due to differences in water infrastructure, geography, and regulatory approaches.

5. Questions on Implementation and Regulation

5.1 Panel's Remit and Implementation of Recommendations

- **An attendee asked whether the panel's recommendations would be meaningful or ultimately ineffective, questioning whether the Government would implement them. They also talked about historical issues related to PFAS.**
    - Dr Hajioff clarified that the panel's remit is not to review past actions, but rather to focus on future improvements and provide recommendations based on scientific evidence.
    - He stated that recommendations have been accepted, although some may not have been implemented as quickly as some would like.
    - He noted that Jersey is ahead of most of the world in addressing PFAS issues,
    - He explained that only a handful of countries globally have looked in detail at the risks from PFAS and that Jersey is among the first ten (of 200 countries) to do so.
- **The questioner countered that other countries already have set PFAS standards and do not require advisory panels.**
- **Another audience member expressed scepticism, suggesting that other countries had not faced the same regulatory challenges.**
- **The questioner asked whether the Government would commit to implementing all recommendations.**
    - Dr Hajioff responded, "Yes, with one caveat"—some recommendations may not be immediately implementable if, for example, they require specific testing equipment that is unavailable within a 500-mile radius.
    - He reiterated that the panel does not police government actions or operate through hidden channels. Instead, it is the public's role to hold decision-makers accountable, while the panel's function is to examine the scientific evidence and provide recommendations.

5.2 Ongoing PFAS Imports and Environmental Controls

- **A question was raised regarding firefighting foam used in the 1960s, noting that PFAS-related risks were identified as early as the 1990s.**

- **The attendee questioned why PFAS-containing products, including agricultural chemicals, are still being imported, arguing that pollutants continue to be introduced into the environment without independent environmental oversight.**
    - Dr Hajioff explained that PFAS is a broad category of chemicals, encompassing over 10,000 different compounds, each with unique properties.
    - To illustrate this, he referenced Prozac, noting that it is technically a PFAS compound, yet widely used in medicine.
- **An audience member interjected that only two specific PFAS compounds were of concern, expressing frustration with broader comparisons.**
    - Dr Hajioff acknowledged this point, explaining that when assessing chemical risks, three key factors must be considered:
        - Does the chemical pose a risk?
        - Does it persist in the environment?
        - Does it accumulate in the human body?
    - He noted that the PFAS compounds of greatest concern in Jersey are those used in firefighting foam, as they persist in the environment and can remain in the human body for over a decade before reducing by half.
    - He stated that the panel would discuss where to draw the line on PFAS regulation in an upcoming meeting, balancing scientific evidence against practical application.

5.3 Boreholes and Water Contamination Data

- **An attendee asked about water wells in the Plume area that have been temporarily capped.**
- **They questioned when water was last extracted from these boreholes and sought clarification on why water companies assert that their supply is clean.**
    - Dr Hajioff responded that he did not have that information at present but confirmed that the panel would be reviewing water distribution data in March and April.
    - He added that the upcoming slides in the presentation would address some of these concerns.
    - Dr Hajioff also noted that the documents in question do not belong to the panel but are part of broader regulatory reviews.

6. MEETING CONDUCT AND KEY RESEARCH AREAS

6.1 Addressing Meeting Conduct

- **An audience member asked for Dr Hajioff to be allowed to finish speaking, expressing concern that a particular attendee was dominating the discussion.**
    - Dr Hajioff acknowledged that the meeting was an emotional one and emphasised the importance of open dialogue.

6.3 International Regulations and Scientific Judgements

- Dr Hajioff explained that international PFAS regulations are based on different types of scientific evidence, and it is important to evaluate the reasoning behind each approach.
- Historically, regulatory limits were based on immune system effects, but more recently, PFOA has been classified as a carcinogen.
- This means that regulations established before this classification must be assessed differently from those developed afterward, ensuring that recommendations for Jersey align with the most up-to-date scientific understanding.
- Drinking water remains a high-priority issue, and efforts are being made to provide answers as quickly as possible.
- Environmental testing also includes assessing groundwater and seawater for contamination levels.

6.4 Testing for PFAS in Food and Other Materials

- **An attendee asked whether tests would be conducted on local food products and other materials.**
    - Dr Hajioff responded that testing will be necessary, but a panel discussion (in public) is needed to determine which areas should be prioritised.

6.5 Treatments for Reducing PFAS in Mains Water

Several potential treatments for reducing PFAS levels in the mains water supply were outlined, including:

- Granular activated carbon filtration
- Reverse osmosis desalination
- Ion exchange systems
- Emerging technologies – While new methods are being developed, many are still in the laboratory phase and have not yet been implemented at scale.

6.6 PFAS Contamination Beyond the Mains Water Supply

- Dr Hajioff noted that water treatment infrastructure in Jersey is different from that in the UK, providing some advantages in managing contamination.
- In the UK, water is treated locally and then distributed through a large, interconnected grid, meaning contamination from one source can spread widely.
- In Jersey, however, water is supplied from only two treatment centres, meaning that potential PFAS issues are limited to two key points of intervention rather than hundreds.

6.7 Clarification on Jersey's Water System

- **An attendee asked whether Dr Hajioff was implying that there is a problem with Jersey's water supply.**
    - He clarified that his point was about efficiency in managing any potential issues, stating that Jersey only needs to address concerns at two locations rather than thousands, making solutions more manageable.

6.8 Treatment of Sewage Sludge and Infrastructure

- Dr Hajioff highlighted that PFAS contamination is not just a water treatment issue—it also affects sewage sludge, pipes, and infrastructure.
- Future considerations include:
    - Whether sewage sludge should be treated through high-temperature incineration or other methods.
    - Assessing the need for infrastructure decontamination, such as cleaning or replacing pipes.

6.9 Consideration of Industrial-Scale Solutions

- **An attendee asked whether Jersey requires an industrial-scale solution, such as desalination, for addressing PFAS contamination.**
    - Dr Hajioff responded that any recommendations must be realistic and physically feasible, considering the space and resources available.
    - He confirmed that he has already met with Jersey Water to discuss options and considerations.
- In addition to mains water treatment, solutions must account for the 2,500 households in Jersey that rely on private boreholes, ensuring that recommendations are robust and inclusive for all water sources.

7. PUBLIC CONCERNS, EXPERT INPUT, AND NEXT STEPS

7.1 Capital Investment in Water Security

- **An attendee asked whether Dr Hajioff would be advising a capital inquiry and if this fell within his remit.**
    - Dr Hajioff responded that capital investment in future water security is important, but the panel has not yet had formal discussions on this topic.
    - While not excluded from consideration, discussions so far have been preliminary.
    - He provided a hypothetical example, stating that if filtration technology were capable of removing all PFAS, additional mitigation measures might not be necessary. However, recommendations must be balanced and evidence-based.

7.2 PFAS in Sea Spray and Seaweed

- **An attendee raised concerns about PFAS concentrations in sea spray, asking whether a global comparison had been conducted.**
    - Dr Hajioff acknowledged that this was a valid question and confirmed that the panel is examining international data.
    - He referenced research from Denmark, where PFAS concentrations in sea spray have been found to be higher than in water beneath it. However, surfers in the study did not exhibit elevated PFAS levels, which suggests that sea spray exposure may not be as significant a concern as initially thought.
- **Another attendee asked how this conclusion was reached.**

    - Dr Hajioff cited a study conducted in Denmark.
- **A follow-up question was asked about seaweed acting as a PFAS reservoir.**
    - Dr Hajioff responded that the type of seaweed matters—deep-sea seaweed is unlikely to be affected as it remains in water with little to no PFAS exposure, whereas shoreline seaweed could be more impacted.
- **A question was raised about whether sea lettuce, which is collected and spread on farmland, could contain PFAS.**
    - Dr Hajioff confirmed that this is an area of investigation, as anything applied to agricultural land has the potential to enter the food chain.
    - When asked if these practices should be stopped, he stated that scientific review is needed before making any policy recommendations.

7.3 Evaluating Scientific Assumptions

- A discussion followed regarding how data can challenge assumptions.
    - Dr Hajioff emphasised that some things may appear obvious, but data often reveals unexpected results.
    - He provided an example from railway air quality research, where installing ventilation in certain stations had the opposite effect of what was intended, highlighting the need for evidence-based decision-making.
    - He stressed that a short delay to ensure scientific accuracy can prevent poor long-term decisions based on incorrect assumptions.
    - He reiterated that no options have been ruled out at this stage.

7.4 Debate Over Expertise and Scientific Process

- **An attendee referenced a UK expert who had visited Jersey, stating that seaweed can absorb and concentrate PFAS and PFOS, potentially acting as a reservoir.**
    - Dr Hajioff confirmed that this was consistent with his own explanation, although he expressed concern that discussions sometimes become unnecessarily lengthy or argumentative.
    - He reiterated the importance of scientific analysis rather than relying solely on assumptions or individual perspectives.

7.5 Call for Public Testimonies

- At 19:05, Dr Hajioff reminded attendees of the time and encouraged experts by experience to come forward.
- He specifically invited those with experience in environmental clean-up to submit testimony. This could be done in a public setting, privately, or in writing.
- A formal call for testimonies was issued, with a deadline for notices of intent by 16th March.
- Those providing testimony will receive a consent form, allowing their information to be used either anonymously or publicly.
- He emphasised that the panel needs more than just subject matter experts—public contributions are equally valuable.

7.6 Inclusion of Local Experts

- **An attendee asked whether experts who have been collecting data for years were being invited to contribute.**
    - Dr Hajioff confirmed that all experts are welcome to submit evidence but acknowledged that not everyone chooses to engage.
- **The questioner asked why some experts were not participating.**
    - Dr Hajioff responded that he could not answer that, reiterating that participation is voluntary and experts are being actively invited.
- **Another attendee pointed out that there are experts on the island, questioning whether they were being approached.**
    - Dr Hajioff stated that while the panel extends invitations, they cannot compel anyone to contribute.

7.7 Next Steps and Future Meetings

- Given the focus on mains water and the need for interim recommendations, Dr Hajioff stated that no immediate date had been set for which meeting experts by experience would attend.
- The panel plans to gather evidence from subject matter experts in two phases:
    1. Mains water quality and contamination
    2. other areas of contamination, including food, the wider environment and agricultural products
- These plans have not yet been formalised and will be discussed in the next panel meeting.
- Dr Hajioff presented a preview of the consent form that will be issued to those providing testimony, allowing them to participate either anonymously or publicly.

8. TRANSPARENCY, OVERSIGHT, AND REGULATORY CONCERNS

8.1 Anonymity in Testimonies

- **An attendee asked how anonymous testimonies would be.**
    - Dr Hajioff reassured the audience that anonymity would be fully protected.
    - He explained that in Report 2, even when individuals had spoken publicly, their names were not included. This was not because they had not consented, but because reports remain in the public domain indefinitely, and people may change their minds in the future about having their health testimony made public.
    - He provided an example of how testimonies might be referenced, such as: *"Four islanders reported cancer, which included conditions A, B, C, and D."*
    - He confirmed that the same approach would be followed in future reports and that if there was any doubt about maintaining anonymity, the panel would err on the side of caution.
    - He further emphasised his commitment to confidentiality, referencing his Hippocratic Oath as a medical professional.

8.2 Independent Regulation and Oversight

- **An attendee raised concerns about how recommendations would be regulated once reports and testing were completed.**
- **They questioned whether the Government would have sufficient expertise to implement the panel's recommendations effectively, suggesting that an independent water regulator was needed to ensure long-term oversight.**
    - This statement was met with a round of applause from attendees.
    - Dr Hajioff acknowledged the feedback, stating:
        1. The panel's commitment to transparency means that all recommendations will include justifications, ensuring that the reasoning behind regulatory levels is clear.
        2. The public plays a crucial role in holding politicians accountable—if elected officials fail to act on recommendations, they can be challenged or replaced at the ballot box.
        3. The suggestion of an independent regulator had not previously been raised, but he recognised its potential importance and would discuss it with the panel to determine whether it falls within their remit.
- **An attendee noted that similar regulatory structures exist in England and questioned why Jersey does not have an equivalent system.**
    - Dr Hajioff stated that the panel would need to clarify what falls within their scope before making recommendations.

8.3 Expanding the Scope of Governance and Regulation

- **An attendee asked whether the panel could expand its scope to separate governance from regulation, ensuring independent oversight of water quality.**
    - Dr Hajioff responded that he would need to consult the other panel members to determine whether they had the necessary expertise to assess governance structures.
    - He noted that governance reviews are typically conducted by individuals with legal expertise rather than scientific specialists.
    - Even if the panel agrees that such a system is a good idea, they would need to determine whether it is within their remit to recommend governance reforms.
    - He welcomed the discussion and acknowledged its importance.
- **A further question was raised about whether politicians are capable of making decisions on PFAS regulations if they do not fully understand the science.**
- **The attendee argued that without independent oversight, policymakers may struggle to make informed decisions.**
    - Dr Hajioff referenced his experience working with 30 governments worldwide, stating that if policymakers do not understand the recommendations, it is his responsibility to communicate them more clearly.
    - He reiterated that his role is to ensure that evidence is properly translated into policy and that he would raise the issue of regulatory oversight with the panel.

8.4 Assessing the Scale of Contamination

- **An attendee asked whether Dr Hajioff agreed with the Public Health Director's (Professor Peter Bradley) statement that PFAS contamination is not an issue beyond the affected area.**
    - Dr Hajioff responded that this issue would be fully examined in the upcoming report.
    - He noted that the absence of evidence does not mean evidence of absence, which is why the panel is reviewing sampling strategies for both environmental contamination and human exposure.
    - He acknowledged that Professor Bradley's statement may be correct based on current evidence but emphasised that new data may emerge in the future.
- **Another audience member stated that they had submitted 104 test results to the Government, which had been accepted, but felt that these results were not reflected in official statements.**
- **A question was raised about whether the issue was being downplayed to suggest that contamination was not island wide.**
    - Dr Hajioff responded that it was not appropriate for him to comment on government communication strategies but stated that he would welcome an opportunity to discuss this further.
    - He explained that, for tests to be meaningful. It had to be clear that there was a clear audit trail following the blood sample from the moment it was taken all the way to a laboratory that is accredited for human PFAS testing. This is standard clinical practice for all blood tests.
    - Some attendees expressed disagreement with his response.

8.5 Concerns About Transparency and Political Influence

- **An attendee remarked that "paranoia is the Jersey way," expressing concerns about transparency and trust in official processes.**
    - Dr Hajioff responded that he would not be pressured into saying or doing anything that was not based on evidence.
- **Another attendee referred to a past statement from a former Health Minister, claiming that the Government was concerned that Jersey could face financial ruin if it became known internationally as 'the PFAS island.'**
- **They asked why there had been warnings against creating a media storm, and whether this indicated that officials were trying to hide something.**
- **They also questioned why the Government had not made the contract with 3M public, suggesting that transparency was lacking.**
    - Dr Hajioff responded that the panel's remit is to provide forward-looking recommendations, and that historical legal matters, such as contracts, were outside its scope.
    - He stated that legal professionals, not the panel, would be responsible for addressing these concerns.
- **Another attendee asked how the public could be certain that the Government would be transparent moving forward.**
- **A separate question was raised about how long the entire process would take and whether it would span multiple years.**

- Dr Hajioff responded that the panel's recommendations would be made public, allowing people to see what has and has not been acted upon.
- He emphasised that this transparency would ensure accountability at election time.
- He reiterated that his role is to present the best possible scientific recommendations and to ensure that they are clearly understood.
- He added that the panel has committed to delivering Report 4 in 2025.

9. TIMELINES, TESTING, AND LEGISLATIVE ACTION

9.1 Timeframe for Report 4 and Panel's Work

- Dr Hajioff explained that when assessing water quality, the panel is considering all possible PFAS exposure pathways, not just mains water.
- He emphasised that their goal is to achieve the maximum possible reduction in PFAS exposure for the lowest cost.
  - Example: If fish contamination were found to be a greater concern than water contamination, then efforts should focus on reducing PFAS in fish rather than prioritising water treatment.
- The panel is set to conclude its work by the end of the year with the publication of Report 4.
- A 5th report may be produced in the future, but for now, Report 4 will mark the end of their current remit.
- The targets for recommendations will depend on the available data.

9.2 Water Treatment Solutions

- **An attendee asked how long it would take to build a water treatment plant.**
  - Dr Hajioff responded that build times will be considered as part of the panel's analysis.
- **Another attendee referenced Australia, stating that a treatment plant was built there within six months.**
  - Dr Hajioff stated that he did not have specific information on that case, as the panel has not yet conducted that analysis.

9.3 Testing Priorities and Data Availability

- **An attendee asked whether the panel believes mains water is the primary source of PFAS exposure.**
- **Another attendee asked whether household sink water would be tested.**
  - Dr Hajioff responded that the panel is prioritising mains water first due to public concern but acknowledged the need to consider other sources as well.
  - He would usually prefer a comprehensive approach, but public demand is driving the focus on mains water, and the panel are happy to do that work first.

9.4 Food and Environmental Testing

- **An attendee asked when a decision would be made on which food products should be tested for PFAS contamination.**
    - Dr Hajioff responded that the panel's review of available data will take place in the summer.
    - Testing will need to be completed before then, but discussions on specific testing priorities have not yet taken place.
- When pressed on why this cannot happen sooner, he explained that multiple aspects of the investigation must be coordinated before testing priorities can be determined.
- **An attendee suggested appointing an independent local tester with full public access to the data.**
    - Dr Hajioff responded that the panel follows a strict chain of custody for testing, using accredited laboratories.
    - He noted that Stockholm University has been used for previous tests and that they will explore multiple options for independent testing.

9.5 Public Access to Testing Data

- **An attendee asked whether the public would have access to the test results.**
    - Dr Hajioff stated that this is a matter that needs to be discussed but confirmed that all tests requested by the panel will be included in their reports.
- When asked whether the panel directly commissions testing, Dr Hajioff clarified that the panel does not conduct testing themselves.
- Instead, they request statutory authorities to undertake the testing.
- **An attendee challenged this, stating that this arrangement is not truly independent.**
    - Dr Hajioff responded that this is standard practice globally.
    - He noted that the panel does not have its own budget for independent testing and that setting up an independent system would require significant time and resources.
    - While he acknowledged audience frustration, he warned that seeking a "perfect" system should not delay urgent action.

9.6 Agricultural Land and PFAS Testing

- **An attendee asked whether agricultural land and fertiliser pellets would be tested for PFAS contamination.**
    - Dr Hajioff confirmed that this is already included in the panel's documentation and will be assessed.

9.7 Timeline for PFAS Legislation and Regulatory Action

- **An attendee asked when legislation to regulate PFAS would be introduced.**
    - Kelly Whitehead responded that the timeframe for drafting legislation would follow the publication of the next report.
    - Dr Hajioff stated that draft water recommendations should be ready by mid-year.

- **An attendee expressed concern that legislation takes too long to implement.**
    - Kelly Whitehead explained that while there is no backlog in drafting legislation, the process still takes time and can take over a year.
- **Another attendee countered that they would rather have it done properly than rushed.**

9.8 Concerns About Transparency and PFAS Monitoring

- **An attendee referenced previous panel discussions, stating that other members had said there was no safe level of PFAS exposure.**
- **They pointed out that a Q&A sheet states that Jersey Water is checking for PFAS in sludge, questioning why this process had only just begun.**
- **They also asked why testing had not been conducted more broadly and why no figures had been released on PFAS runoff into St Aubin's Bay, expressing concerns that the issue was being downplayed.**
    - Dr Hajioff responded that the Panel met with Jersey Water six months ago and provided suggestions on what they should be testing for.
- **An attendee questioned whether Jersey's regulatory approach aligns with international best practices, pointing out that no global regulatory standard exists for PFAS in effluent runoff.**
    - Dr Hajioff acknowledged that PFAS regulation changed significantly in July when PFOA was officially classified as a known carcinogen.
    - He explained that when dealing with cancer-causing chemicals, there is technically no safe level, but this does not mean regulatory limits must be set at zero.
    - In many cases, achieving zero may be impossible or unfeasible due to detection limits and technological constraints.
    - He stated that just because no international standard exists for effluent runoff does not mean that the panel will avoid making recommendations.
    - The panel will assess what is scientifically justifiable and practically achievable, rather than simply following existing international standards.

10. FINAL DISCUSSIONS, PUBLIC CONCERNS, AND NEXT STEPS

10.1 Scope of PFAS Testing and International Comparisons

- **An attendee expressed frustration that government records suggest limited scientific evidence on PFAS, arguing that the focus is only on firefighting foam while ignoring other PFAS compounds present in everyday products.**
    - Dr Hajioff clarified that scientific evidence does exist and that the panel is collaborating with New Jersey, North Carolina and other jurisdictions, where significant regulatory work is ongoing.
    - He suggested that there may be a misunderstanding about how 'States' was referenced in different contexts.

- **Another attendee questioned why Jersey's Government is only monitoring PFAS linked to firefighting foam, despite no evidence that these are the only problematic compounds.**
    - Dr Hajioff explained that Jersey's contamination profile is specific, and the most prevalent compounds have been identified as those historically used in firefighting foam.
    - He noted that in New Jersey, different PFAS compounds are being monitored, reinforcing the need to prioritise contamination sources specific to Jersey.

10.2 PFAS and Incineration

- **An attendee asked whether PFAS emissions from Jersey's waste incinerator, particularly from burning plastic waste, were being examined.**
    - Dr Hajioff confirmed that incineration is being reviewed as part of the panel's work and that high-temperature incineration may be considered as a method to destroy PFAS compounds.

10.3 The 3M Contract and Government Transparency

- **An attendee raised concerns about the contract between 3M and the Government of Jersey, asking what 3M had provided to the Government and whether the Government was aware of the extent of PFAS contamination.**
    - Dr Hajioff stated that this falls outside the panel's remit and that no manufacturers have contacted the panel.
- **Another attendee asked whether the Government of Jersey had been contacted by 3M regarding the contamination.**
    - Dr Hajioff responded that he did not know but emphasised that the panel's role is to provide scientific guidance for future policymaking, not to investigate past agreements.
- **The attendee questioned whether the panel was being kept in the dark about past actions.**
    - Dr Hajioff reaffirmed that he is not privy to past legal agreements and stated that focusing on historical disputes would distract from future solutions.

10.4 Public Perception and Psychological Impact

- **An attendee asked how Dr Hajioff felt about the fact that many islanders are afraid to drink Jersey water and urged him to raise this concern at the next panel meeting.**
    - Dr Hajioff acknowledged that psychological concerns over PFAS exposure are real and were discussed in Report 2.
    - He stated that even if PFAS were proven to be safe, the fear and anxiety surrounding exposure still have measurable impacts on well-being.
- **An audience member interjected: "I won't drink it."**
    - Dr Hajioff responded that if people fear something as fundamental as water, that is a serious issue.

- He acknowledged that members of the publicnot being able to control their ownexposure is a legitimate concern, and the panel's role is to help shape regulation that addresses this.

10.5 Is Jersey's Water Safe?

- **An attendee asked directly: "Is Jersey's water safe to drink?"**
  - Dr Hajioff responded that nothing in life is 100% safe, and that should be the starting point of the discussion.
  - "Jersey's water is not worse than elsewhere, but it could be better."
  - He compared perception of risk and control, explaining that people fear situations they cannot control.
  - Example: "Many people are afraid of flying but continue to smoke—because smoking feels like a choice, whereas a plane is out of their control. Water is similar; you can't avoid it, and you can't fully control your exposure, which makes the risk feel more significant."

10.6 Historical PFAS Exposure

- **An attendee asked how dangerous the water was before boreholes were capped three years ago.**
  - Dr Hajioff stated that he does not have historical data but noted that PFAS exposure in the UK in the 1990s was significantly higher than it is now.
  - He explained that global PFAS exposure has declined over the past 30 years due to reduced industrial use and regulation.
  - He cited the sampling of Islanders in2022, which found that average PFAS levels among those tested, while elevated, were half of what the average levels were in 1993 in the US population.
- **Another attendee suggested that PFAS levels in 2003 would have been significantly higher than today.**
  - Dr Hajioff agreed, stating that he is not downplaying the issue but providing historical context. He pointed out that, in report 2, the panel had extrapolated the likely levels in the early 2000s.
- **The attendee responded: "It's still a problem."**
  - Dr Hajioff agreed: "I don't dispute that."

10.7 Broader Environmental and Human Rights Concerns

- **An attendee shared their personal experience, stating that they had been away from Jersey for 15 years and recently returned to find their PFAS blood levels high despite living in a remote mountain area abroad.**
- **They listed multiple health conditions, including autoimmune thyroid disease, and expressed frustration over perceived inaction.**
- **They referenced environmentalist contributor and highlighted their own background in environmental remediation.**

- **They argued that Jersey's natural Atlantic environment should make it easy to protect residents from contamination and accused the Government of failing to uphold islanders' human rights.**
- **They further expressed concerns over conflicts of interest and asserted that no one is safe without independent regulation.**
    - Dr Hajioff encouraged them to submit their evidence to the panel, stating that this is the best way to ensure their concerns are formally considered.

10.8 Conclusion and Next Steps

- Dr Hajioff apologised for the meeting overrunning.
- Kelly Whitehead thanked attendees for their participation and encouraged them to review the data and look out for upcoming meetings.
- She provided the Regulation Enquiries email address (regulationenquiries@gov.je) for further questions or submissions.
- The meeting concluded with a round of applause.

Meeting adjourned at approximately 20:05hrs

Questions for FAQ:

1. How has PFAS exposure changed over time? Was it worse in the past?
2. What measures are being taken to regulate ongoing PFAS imports?
3. Why is the government focusing on firefighting foam PFAS rather than all PFAS compounds?
4. What steps are being taken to test for PFAS in agricultural land?
5. How does Jersey's PFAS contamination compare to Guernsey?
6. What is the timeline for PFAS legislation in Jersey?
7. Has the Government of Jersey been contacted by 3M regarding PFAS contamination?
8. What are the different PFAS removal methods being considered for Jersey's water supply?
9. Is there a plan to test household tap water for PFAS contamination?
10. Will the panel recommend an independent water regulator for Jersey?
11. Why has PFAS in seaweed and marine life not been more widely investigated?
12. What impact does PFAS in sea spray have on human health?
13. What regulatory options exist for PFAS in sewage sludge and incineration?