

STATES OF JERSEY



DRAFT WATER LAW (JERSEY) AMENDMENT REGULATIONS 202- (P.26/2026): AMENDMENT (P.26/2026 AMD.) – COMMENTS

**Presented to the States on 20th March 2026
by the Minister for the Environment**

STATES GREFFE

COMMENTS

I thank the Minister for Treasury and Resources for her proposed amendment to the draft Water Law (Jersey) 1972.

I welcome her support for the recommended limit of 4 ng/L for the sum of four PFAS from the PFAS Scientific Advisory Panel. However, I disagree with the alternative timeline for reaching this limit.

The Treasury Minister's amendment proposes an interim limit of 10 ng/L from 31 October 2027, before introducing a limit of 4 ng/L from 1 April 2033. However, this approach needs to be considered in light of the detailed considerations by the PFAS Scientific Advisory Panel.

The Panel's recommendations are for an enforceable standard of 4 ng/L for the simple sum of four PFAS. Another of its recommendations refers to the use of a 10 ng/L guidance value for the average sum of 48 measurable PFAS as an additional monitoring and reporting level. The Panel considered and debated a level similar to the Treasury Minister's proposal of 10 ng/L per litre for the sum of 4 PFAS, however, it concluded that 4 ng/L was the most appropriate.

It may be considered by some that having 10 ng/L for the sum of four PFAS is a beneficial improvement, given Jersey Water's Annual Report states that it achieves 12 ng/L for the sum of four PFAS currently.

However, I do not believe that 10 ng/L for the sum of four PFAS from October 2027 up until April 2033 as proposed by the Treasury Minister offsets the benefits that would be gained by introducing my proposal for a limit of 4 ng/L for the sum of four PFAS by 1 January 2031 at the latest. The key aim here is the introduction of the 4 ng/L for the sum of four PFAS limit as soon as practicable.

At its public meeting in March 2025, the Panel discussed the introduction of a 10 ng/L limit but decided that 4 ng/L was appropriate. Whilst moving from a 12 ng/L limit to 10 ng/L could seem a positive step, the Panel affirmed that the health benefits to exposed populations was negligible with this 2ng/L differential. The substantial health benefit comes from reaching 4 ng/L as soon as possible because ingestion of food and water is the main cause of PFAS exposure and water exposure is the element of ingestion that can be controlled.

In July 2025 the Panel met in public and discussed in detail the PFAS drinking water standards for Jersey.

The Panel was unanimous in agreeing that Jersey should adopt a limit of 4 nanograms per litre for the sum of four PFAS. This forms the Panel's primary recommended drinking water standard. The 4 ng/L threshold is grounded in the European Food Safety Authority's (EFSA's) Tolerable Weekly Intake (TWI), which is currently the most comprehensive and authoritative assessment of PFAS health effects available internationally.

Importantly, this limit focuses on the four long chain PFAS – PFOS, PFOA, PFHxS and PFNA – which are recognised as the most harmful. These same compounds are known to be present in Jersey's water supply and are strongly linked to contamination from

historical use of AFFF (aqueous film forming foam) firefighting foams, making this standard both scientifically valid and directly relevant to Jersey's specific exposure profile.

The Panel also emphasised that the 4 ng/L threshold places Jersey amongst the strongest international drinking water standards currently in force. Sweden has already implemented 4 ng/L as a binding and enforceable limit and Denmark 2 ng/L.

Adopting the same standard places Jersey at the forefront of global best practice, offering the public a high level of protection and reassurance.

By contrast, using a higher threshold – such as the 10 ng/L limit for 48 PFAS used in some jurisdictions – could obscure significant risks. A single harmful PFAS compound, such as PFOS or PFOA, could be present at a worrying level while the total remained below 10 ng/L. Setting a clear, low limit for the four most toxicologically significant PFAS avoids this problem and ensures that the approach remains focused on the chemicals with the strongest links to adverse health outcomes.

The Panel further agreed that the 4 ng/L limit is practical, measurable and achievable. Modern laboratories can detect PFAS at concentrations far below this threshold, meaning the standard can be monitored with confidence. In addition, the technologies required to meet the limit – such as granular activated carbon and ion exchange resins – are well established and widely used internationally. With appropriate investment and planning, Jersey can successfully implement treatment processes capable of achieving the recommended standard.

Finally, the Panel noted that the 4 ng/L limit is particularly appropriate given Jersey's unique contamination profile. The island's PFAS contamination stems predominantly from 'long chain PFAS' used in firefighting foams. Because these compounds correspond directly to the four PFAS included in the recommended threshold, the limit provides strong, targeted protection for the types of PFAS most likely to be found in Jersey's drinking water.

Alongside the primary recommendation, the Panel also proposed a secondary monitoring threshold: 10 ng/L for the sum of 48 measurable PFAS. This broader figure is intended only for surveillance and transparency, not for enforcement. It will allow Jersey Water and regulators to track trends in a wider range of PFAS, identify emerging contaminants, and maintain public confidence through open reporting without undermining the clarity or strength of the primary regulatory limit.

To explain further why this limit of 4 ng/L for the sum of four PFAS is appropriate, I would like to refer to the progress of other countries and the work of the European Food Safety Authority (EFSA).

A number of countries have recently adopted drinking water limits based on the European Food Safety Authority (EFSA) risk assessment, which provides the most influential and comprehensive evaluation of PFAS health impacts to date. EFSA set a tolerable weekly intake (TWI) of 4.4 ng/kg of body weight per week for exposure to the group of four long chain PFAS: (PFOA, PFOS, PFHxS, and PFNA). These four were chosen because they have the strongest evidence of harm, the longest biological half lives in humans, and the greatest relevance for health-based regulatory limits.

They are also the PFAS most consistently detected in drinking water contamination incidents, including areas impacted by AFFF firefighting foam which contains PFAS.

The tolerable weekly intake is based primarily on evidence of reduced vaccine response in children, the most sensitive health effect supported by human epidemiology. Other health outcomes, such as increased cholesterol and reduced birthweight, also point toward similar exposure levels, adding confidence to the threshold.

To convert this tolerable weekly intake into a drinking water limit, regulators must make assumptions about daily water consumption, expressed relative to bodyweight, and how much of a person's total PFAS exposure would reasonably come from drinking water (known as the *Relative Source Contribution*).

Most authorities now use a *Relative Source Contribution* of 20%, recognising that food and other environmental sources typically account for the majority of PFAS intake in the general population.

Applying the EFSA tolerable daily intake, together with a 20% drinking water contribution and applying some complicated maths, results in a calculated drinking water concentration of 4 ng/L for the sum of four PFAS.

It is worth noting that a regulatory limit of 2 ng/L for the sum of four PFAS was considered. What the final regulatory limit should be had been discussed at length by the Panel in relation to the EFSA's tolerable weekly intake and the contributions from food and water. In March 2026, the Panel meeting concluded that 4 ng/L for the sum of four PFAS was appropriate. This was because the work on PFAS content in foods and testing in Jersey had been completed and there was no material difference with food consumed in Jersey that was specifically grown or raised in Jersey.

Sweden has already adopted this value as a national standard (moving from guidance to an enforceable limit in 2026), and Denmark uses the same scientific basis, though with a lower relative source contribution of 10%, that results in a 2 ng/L limit.

Germany, while acknowledging the EFSA model, has set a higher interim limit of 20 ng/L to allow for phased implementation given existing failures to meet regulatory standards in its water supply. The Netherlands also uses EFSA's TWI but applies *relative potency factors* to weight the PFAS differently by toxicity.

In summary, the 4 ng/L limit emerges directly from:

- EFSA's scientifically robust TWI of 4.4 nanograms per kilogram of body weight per week for the four most toxicologically relevant PFAS;
- the assumption that 20% of total exposure should come from drinking water; and
- widely adopted water intake assumptions used in international risk assessment.

This 4 ng/L limit focuses on the PFAS of greatest health concern, is achievable with modern treatment technology, and represents the strongest internationally aligned approach for protecting public health.

The Panel's work has recommended that mains water should be treated to achieve a level of 4 ng/L for the sum of four PFAS as soon as is practicable and within five years.

Jersey Water has been fully engaged with this work and has been well aware of the direction of travel for PFAS limits. It has long known about and been aware of PFAS and has, to an extent, driven the work we are discussing now.

Jersey Water has been unable to use all available raw water sources in the Island, in particular its boreholes in St Ouen's Bay and surface stream abstraction in the Pont Marquet catchment, because of the risk of PFAS concentrations impacting the quality of mains water it supplies.

I note that much of the focus of the Treasury Minister's amendment is not on the ultimately achievable limit of 4 ng/L but on the cost and financial implications of my 1 January 2031 timeline. In lodging my Amendment, I stated that there are no financial implications to this Amendment for Government. I wish to qualify that statement.

Whilst there are no financial or resourcing implications to the regulator as a result of this amendment, there could be significant future capital costs for new water treatment intervention to achieve the limit should Jersey Water seek funding from Government. If not, capital costs of intervention technologies to achieve the new limit could be sought from significant increases in water bills, impacting on water affordability across the Island. At present, I understand that Jersey Water does not know the exact capital costs of intervention until it completes its pilot trials in 18 months. Depending on the level of intervention required to achieve the new limit, costs could range from £10million for treatment solutions within the existing facilities, or a new water treatment plant at upwards of £200million.

Whilst I acknowledge this financial implication, I must also define clear roles and responsibilities. As Minister for the Environment, I am in charge of environmental regulation. The Minister for Treasury and Resources has a shareholder responsibility in Jersey Water and acts as overall custodian of the public finances. This structural difference is what drives each other's financial statements. However, whilst the roles and responsibilities of Government are important, what we agree on is key – we are not debating the achievability of a limit, only the timeframe in which to deliver it.

The Minister for Treasury and Resources believes that more time is needed for further technical work to determine the most effective engineering solution.

However, I am not convinced that delays to explore engineering solutions are necessary. There are multiple examples around the world of Granular Activated Carbon-based treatment solutions to existing plants being completed in three years. The Panel were presented on 26 March 2025 with such an example from Uppsala in Sweden. Construction of this project began in September 2021 and was completed in September 2024. The cost was approximately SEK 270 million (£21,719,000).

At the same meeting, the Panel also heard from a German expert who had delivered a comparable Granular Activated Carbon scheme across two plants serving a larger population than Jersey; this was completed for approximately 15.8 million euros (£13,652,000).

Similarly, for Ion Exchange, the Panel was presented on 23 April 2025 with an example of a project in California which took three years for construction. This and other examples from international water experts have been part of the evidence base on which

the panel has based its recommendation of ‘as soon as is practicable and within five years’.

Jersey Water presented the Panel with its preferred solution for PFAS in March 2025. This was Granulated Activated Carbon and Ion Exchange resins at the two existing water treatment plants at an estimated cost at that time of £20 million per water treatment plant, so £40 million in total for their Handois and Augres sites.

At that time, there was no indication of engineering impossibilities. Again, the Panel drew from this evidence base in the deliberations on its recommendations. I understand now that Jersey Water may have new evidence since that time, but this has not been presented to the Panel nor to me. In fact, only in the last week has it been expressed to me that there have been engineering options explored and I would suggest that these should be reviewed and the assumptions tested. I understood that engineering option appraisals would run concurrently with the 18-month pilot trials, so I anticipate that we will have more information in upcoming months.

There is another point to mention in relation to the timing. Article 12 of the Water (Jersey) Law 1972 permits Jersey Water to apply for a dispensation if it is unable to meet the chemical parameters set out in the Schedule to the Law (and to which PFAS is being added). If the granting of dispensations by the Minister for the Environment is based around health considerations, then the Minister for Health must also be consulted.

If Jersey Water found itself under pressure to meet the timeline for meeting the new parameters, I am proposing that it could then apply for such a dispensation.

Dispensation provisions have been used in the past for nitrate, iron and manganese levels within mains water. Nitrates provide a good example of these dispensation provisions in action and are currently in place. When this limit was established in the Water Law, the level of 50 milligrams per litre was deemed unattainable by Jersey Water.

This resulted in positive and combined action by the Action for Cleaner Water Group (which includes the Government of Jersey, Jersey Water, the agriculture industry and other stakeholders) that successfully reduced nitrates in the water sources across our Island. This dispensation has been repeatedly requested since 2017, without impacting on the reputation of Jersey Water. In fact, Ministerial Decision MD-ENV-2024-695 granted Jersey Water a dispensation for nitrate from 01 January 2024 to 31 December 2028, with conditions.

To conclude, the limit and dates set out in my amendment, based on the recommendations of the PFAS Scientific Advisory Panel, take into account the timescales required to implement a realistic, proportionate and effective solution to deal with PFAS levels in Jersey’s mains water.

While I welcome the Treasury Minister’s support for the 4ng/L figure, we do not need an unnecessary delay in reaching it.

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I thank the Deputy of St. Mary, St. Ouen and St. Peter for bringing forward her amendment. I welcome the fact that the Deputy shares my view of the importance of implementing the 4 ng/L limit without delay, and that providing wholesome water is both a critical infrastructure matter and a public health priority.

In the report accompanying her amendment, the Deputy proposes installing proven reverse osmosis treatment in every household, on the basis that this presents a lower upfront cost.

While I appreciate the pragmatic intention, this approach has several significant limitations. The first is one of responsibility. The Water (Jersey) Law 1972 places the duty for the quality of water supplied to the public squarely with Jersey Water. Introducing a system where compliance with a statutory standard relies on treatment within individual homes and businesses would fundamentally change that position. It would create uncertainty as to who is accountable for meeting the 4 ng/L limit and would likely require changes to primary legislation.

There are also practical concerns. Reverse osmosis systems typically remove beneficial minerals that support human health, such as calcium, fluoride, magnesium, and potassium unless paired with blending units. They produce a high volume of wastewater that can be up to 20% of the volume of the water it supplies. This is an issue given Jersey Water's projected deficit of 8.6 million litres per day by 2035 in a worst-case drought scenario.

The waste-stream will contain concentrated PFAS and other contaminants such as nitrates, all of which would need to be directed into the foul sewer system to avoid groundwater contamination. This may not be possible in some locations away from the foul sewer network. In any case, this simply transfers the problem to the sewage treatment works, increasing both the volume and quality of wastewater requiring treatment and contaminant loading in biosolids applied to land, and ultimately contributing to pollution entering St Aubin's Bay.

Further issues include installation and maintenance. These units are usually installed under the sink and supply a single tap. This means that only a small proportion of household water, typically for drinking, cooking, or making hot drinks, would be treated. Exposure through washing and showering would remain a small but potential concern.

Regular servicing is essential for these systems to remain effective, yet ensuring consistent maintenance across all island households would again be challenging.

For these reasons, I am unable to support the Deputy's amendment.

Further comment

I am aware of remarks that point to the work of the World Health Organisation (WHO) in relation to PFAS. WHO is in the process of developing guideline values, but meanwhile its advice to its member states in relation to PFOS and PFOA in drinking water is guided by key principles laid down in the draft background document for the guidelines for drinking water quality (GDWQ) on PFAS in drinking water, namely:

1. Member States should strive to achieve concentrations in drinking water that are as low as reasonably practical.
2. Contamination of water sources should be minimized, including preventing new sources of contamination.
3. Non-essential uses of PFAS should be stopped.
4. Risks from PFAS need to be balanced with other risks in the water supply, including not having adequate supplies of drinking water.

I note the World Health Organisation has considered PFAS for a number of years. In 2022 it proposed a global target of 100 ng/L for two PFAS compounds, namely PFOA and PFOS. This was subsequently challenged by a number of health professionals who questioned the rationale that there was not sufficient health data to agree a number.

As a result, WHO issued a further call for submissions from health experts and interested parties on 6 February 2026 with a focus on 18 particular PFAS compounds within drinking water so as to provide a global figure in 2027.

Any WHO figure will need to consider the broad differences in the different capabilities in water infrastructure and treatment across countries globally. However, the detailed work of the PFAS Scientific Advisory Panel means there is no need to wait for a future WHO figure which will not be specifically tailored to Jersey's particular circumstances.

I remain confident in the findings and recommendations of the independent PFAS Scientific Advisory Panel.

Conclusion

In bringing my Amendment to the Water Law, I am firmly following the recommendations of the PFAS Scientific Advisory Panel that are grounded in scientific evidence and world leading expertise. The Panel's completed Report 4 which was published on 19 March will be followed by another period of Islander input and peer review from the host of international experts that have been involved. On the basis of their expert knowledge, they will be asked to confirm if the contents of the report and recommendations are practicable and reasonable.

I cannot support the Treasury Minister's Amendment that is based not on scientific rigour, but on requests from Jersey Water that lack expert scrutiny. Also, I cannot support Deputy Moore's Amendment due to the practical and legal challenges I outline in this paper.

Ultimately, my amendment to the Water (Jersey) Law 1972 will benefit the Island through the introduction of an enforceable limit that will help safeguard public health. My amendment is sensible, proportionate and deliverable.

Statement under Standing Order 37A

The Minister wishes to apologise for the lateness of comments. There were uncertainties surrounding whether an additional amendment would be submitted by another party and the Minister wished to make sure that his comments paper best addressed all contributions to the debate.