Submission to the United Nations Special Rapporteur on toxics and human rights' "Call for Input - Forever Chemicals (PFAS) and Human Rights"

Netherlands, 9 January 2026

Dear Dr. Marcos A. Orellana,

We welcome the opportunity to contribute to the Special Rapporteur's thematic report on PFAS and human rights. In the Netherlands, PFAS illustrate an operational, governance and justice problem: their persistence and widespread use mean that once released, the burden of monitoring, treatment, and remediation can be shifted to communities and essential public services (water management and drinking-water supply), while exposure and risks remain unevenly distributed.

Against this background, over 99% of Dutch waters are of insufficient chemical quality[1], and PFAS are explicitly identified among the pollutants contributing to poor water quality, alongside other sources (e.g., pesticides and medicine residues). This context is directly relevant to the rights to health, to safe drinking water and sanitation, and to a clean, healthy and sustainable environment.

This submission offers an initial overview and cross-section, highlighting water-related key issues of PFAS and human rights in the Netherlands. This contribution is submitted jointly by the Dutch Water Authorities, the Dutch National Association of Drinking Water Companies (VEWIN), and the Netherlands Institute for Human Rights (College voor de Rechten van de Mens). The National Institute for Public Health and the Environment (RIVM) reviewed this submission to verify the correct and accurate representation of its research findings.

1) PFAS EXPOSURE AND IMPACT: information on pathways to exposure and the adverse impacts of PFAS on human rights

In the Netherlands, exposure to PFAS can occur via multiple pathways, including food chains, soil/dust, occupational exposure, and drinking water. The water domain is critical because PFAS can contaminate surface water and groundwater used for drinking-water production and other public functions (ecosystems, recreation, irrigation). Moreover, PFAS are difficult and costly to remove once they enter water systems. RIVM reports[2] that PFAS are widely (>90%) found in human blood in the Netherlands and that, for part of the population, health implications cannot be excluded, including implications on the immune system. Another study by the RIVM indicates that PFAS levels in the population are a structural concern. It concludes that average intake is typically more than three times higher via food than via drinking water, while noting that the contribution from drinking water varies by source (surface water versus groundwater), and local circumstances[3]. RIVM assesses that long-term intake can exceed health-based guidance, which does not imply that everyone will become ill but supports the need for preventive exposure reduction. While the Dutch drinking water already meets the upcoming EU 'sum of PFAS' legal standard (effective 12 January 2026), RIVM has proposed a stricter health-based guideline; meaning drinking-water companies need to assess their monitoring results against both benchmarks and determine whether additional measures – like preventing pollution at source – are needed where the stricter guideline is not met[4]

Exposure pathways and potential impacts engage human rights concerns in a particularly "lock-in" way: PFAS persistence means present emissions can create long-term exposure profiles and long-lived contamination, making preventive protection (rather than after-the-fact mitigation) central to fulfilling rights in practice.

[1] CLO (2025). Chemische waterkwaliteit oppervlaktewater KRW, 2024 (indicator 1566, versie 06, 15 december 2025), www.clo.nl. Centraal Bureau voor de Statistiek (CBS), Den Haag; PBL Planbureau voor de Leefomgeving, Den Haag; RIVM Rijksinstituut voor Volksgezondheid en Milieu, Bilthoven; en Wageningen University and Research, Wageningen.
[2] Rijksinstituut voor Volksgezondheid en Milieu (2025) PFAS in bloed van de Nederlandse bevolking
[3] Rijksinstituut voor Volksgezondheid en Milieu (2023) Risk assessment of exposure to PFAS through food and drinking water in the Netherland
[4] Inspectie Leefomgeving en Transport (2025) Drinkwaterkwaliteit 2024

2) ENVIRONMENTAL JUSTICE: information on how PFAS impacts communities in vulnerable situations and developing countries

Environmental justice concerns arise where exposure, risk and remediation burdens are distributed unevenly. Dutch biomonitoring in blood points to differences between regions, some PFAS were found in slightly higher quantities in inhabitants of the Dordrecht and Westerschelde regions than in the rest of the Netherlands.and differences between population groups: for example, slightly lower amounts in children and women of reproductive age than in the rest of the population, while still remaining above a health-based guidance value for almost the entire population[5]. For the Caribbean Netherlands (Bonaire, St. Eustatius, and Saba) biomonitoring information is lacking.

Beyond measured exposure, justice concerns also appear in the capacity to respond: communities with less access to monitoring, specialised health information, legal support, or political leverage may be less able to understand exposures, claim compensation, or influence preventive action. The right to non-discrimination requires attention to the needs of vulnerable groups as a substantive requirement, alongside procedural guarantees that enable meaningful participation and access to justice.

PFAS persistence shifts burdens onto future generations because the costs of contamination, monitoring and remediation continue long after emissions occur. This raises the issue of intergenerational burden-sharing: today's benefits from PFAS production and use can translate into long-term constraints on future public services (including the right to safe drinking water), ecosystem health and public budgets. The Netherlands Institute for Human Rights has explicitly framed the right to a clean, healthy, and sustainable environment in a way that supports attention to such intergenerational equality[6].

3) PHILOSOPHY: ethical responsibilities in PFAS production and release

The ethical issue is not only that PFAS can be harmful, but that it is very persistent and therefore foreseeably burdensome[7]. It presents a clear intergenerational ethics problem: long persistence can restrict the environmental options available to future generations and impose enduring costs on society. This strengthens the ethical basis for a precautionary and prevention-first approach: where harms are potentially serious and remediation is uncertain or expensive, delaying action effectively transfers risk and costs forward in time.

Responsibility is shared but differentiated across public and private actors. The State has duties to protect against foreseeable harms (including harms caused by third parties) through effective regulation, permitting, monitoring, enforcement, and remedies. Businesses have responsibilities to avoid causing or contributing to human rights harms, to conduct due diligence, to disclose relevant risk information, and to contribute to remediation and compensation consistent with polluter-pays logic—especially where products and emissions generate long-lived, diffuse contamination. This resonates with the international human rights and environmental law principles the Netherlands Institute for Human Rights highlights as relevant to interpreting and applying the right to a healthy environment: no-harm, prevention, precaution, equality and non-discrimination, polluter pays, best available science, and non-regression.

From the Dutch water-sector perspective, the ethical responsibilities of the present generation include avoiding decisions that make safe water services structurally more difficult or expensive in the future. VEWIN and the Dutch Water Authorities have therefore argued for a swift, comprehensive, and universal PFAS ban and have stressed that the most effective approach is to tackle pollution at its source[8].

4) SCIENCE: best available scientific evidence regarding risks and impacts of PFAS on the effective enjoyment of human rights

A key science-policy feature of PFAS is the combination of persistence, broad use, and multiple emission pathways—meaning that even where individual sources are reduced, background contamination and long-term exposure can remain. The extensiveness of the PFAS group is also

[5] Rijksinstituut voor Volksgezondheid en Milieu (2025) PFAS in bloed van de Nederlandse bevolking
[6] College voor de rechten van de Mens (2024) Mensenrechten in Nederland 2023 – Realisatie van het recht op een schoon, gezond en duurzaam leefmilieu in Nederland – deel 1 Juridisch Kader, p. 28, 42
[7] Rijksinstituut voor Volksgezondheid en Milieu (2024) The risks of PFAS (including F-gases) emissions – summary of the substantiation of the REACH restriction proposal
[8] VEWIN, Dutch Water Authorities (2025) Letter to European Commissioner for Environment, Water Resilience and a Competitive Circular Economy: Call for swift, comprehensive and universal PFAS ban

relevant; PFAS are commonly treated as a large class of substances rather than isolated chemicals, which has influenced regulatory and policy approaches.

Dutch evidence[9] also highlights practical knowledge gaps. ILT's mapping and investigative work indicates that building a complete and consistent overview of PFAS sources, permits and emissions is difficult; data can be fragmented across competent authorities and reporting systems, and important information may be missing (e.g., permit data not obtained from several environmental services during information collection). These gaps matter for rights protection: without robust information, it is harder to prevent exposure, enforce permits effectively, and provide transparency to affected communities.

RIVM notes[10] that the European Food Safety Authority (EFSA) has revised health-based values for PFAS imply substantially lower tolerable intakes compared to older values. RIVM applies mixture approaches using relative potency factors to express different PFAS in PFOA-equivalents, enabling comparison against norms or risk limits in a way that is more aligned with real exposure patterns. This mixture approach contributes to the evidence base and scientific certainty of PFAS exposure through human consumption[11].

Furthermore, scientific uncertainty should not be used to postpone prevention where risks are plausible, and pollution is difficult to reverse. Instead, the combination of persistence, wide dispersion, and evidence of population exposure supports precaution, structured monitoring obligations, and proactive transparency – especially around drinking-water abstraction areas and sensitive ecosystems. This is essential to human rights protection because the adequacy of norm-setting and the timeliness of regulatory updates are key determinants of whether States can credibly claim they are protecting the right to health and to a healthy environment.

5) TRANSBOUNDARY MOVEMENTS: exports and imports of PFAS, products containing PFAS, and PFAS-laden waste

PFAS pollution is transboundary via trade in PFAS and PFAS-containing products, cross-border movement of waste, and environmental transport. For the Netherlands – embedded in international river basins – this has direct relevance to drinking-water source protection and downstream treatment burdens. The Dutch water sector has emphasised[12] that PFAS is transboundary and that a European solution is therefore essential, including to prevent diverging national standards and to ensure coherence between surface water, groundwater, and drinking-water legislation.

A transboundary PFAS framing is central to human rights because it affects who bears exposure and remediation burdens and whether effective prevention can be achieved at all. If upstream emissions undermine downstream drinking-water resources, the affected populations' rights to health and safe water may be impaired regardless of local governance quality. This is an area where international cooperation – explicitly recognised as a relevant condition for realising the right to a healthy environment – becomes operationally decisive.

6) RESPONSE MEASURES: information on how national, regional governments, and multilateral processes and institutions, are responding to the challenges posed by forever chemicals, including laws and jurisprudence

(a) Prevention at source: restrictions, bans and "essential uses"

For PFAS, prevention at source is widely seen as the most effective intervention because PFAS are difficult and expensive to remove once released. This is strongly emphasised by the Dutch water sector: "that which does not enter the water does not require removal." VEWIN and the Dutch Water Authorities support a swift, comprehensive, and universal restriction of PFAS and emphasise that prevention at source is the most effective strategy[13]. The Dutch Government's response to the Dutch Water Authorities indicates[14] strong reliance on an EU-wide restriction pathway, combined with preparatory domestic measures. An "Actieprogramma PFAS" will be initiated in cooperation with industry to accelerate phase-out where possible and to stimulate safer alternatives, and it notes that the Minister of Infrastructure and Water Management has committed to exploring the options for a

[9] Inspectie Leefomgeving en Transport (2024) PFAS-bronnen in Nederland: Bronnenonderzoek op basis van monitoringdata
[10] Rijksinstituut voor Volksgezondheid en Milieu (2024) PFAS verontreinigingen: een overzicht van beschikbare risicobeoordelingsinstrumenten voor gebruiksfuncties van oppervlaktewater
[11] Rijksinstituut voor Volksgezondheid en Milieu (2021) Memorandum on the implementation of the EFSA sum TWI of PFASs
[12] VEWIN, Dutch Water Authorities (2025) Letter to European Commissioner for Environment, Water Resilience and a Competitive Circular Economy: Call for swift, comprehensive and universal PFAS ban
[13] Ibid
[14] Ministerie van Infrastructuur en Waterstaat (2025) Reactie op uw brief over PFAS

national PFAS ban if EU restriction would take too long. From a human-rights perspective, these are prevention-aligned measures. The rights-based question becomes whether the pace, scope and enforceability of restrictions are proportional with the persistence and population-level exposure that already exists, and whether "essential use" derogations remain narrowly defined, time-limited and transparently justified.

(b) Permitting, supervision and enforcement: the legal chain and wastewater pathways

The Dutch Government identifies[15] a major task for permitting, supervision and enforcement and anticipates a larger implementation effort for [redacted] authorities and other subnational actors as the State strengthens its coordination role. The Government outlines further efforts to improve grip on indirect discharges and includes pilots with environmental services and water authorities to strengthen attention to and control of indirect discharges. The response further refers to a policy-wide evaluation of the legal system in the wastewater chain and analysis of competence allocation and periodic review of discharge permits to improve control of direct discharges and meet international rules.

These measures are directly relevant to the Special Rapporteur's focus on legal and institutional shortcomings: PFAS is precisely the type of persistent pollution where a fragmented or under-resourced enforcement chain can translate into chronic exposure, long after the risks are widely known.

(c) Remediation, innovation, and public funding

The Government response[16] points to public support for addressing PFAS soil contamination through earmarked funds and to a risk-driven remediation approach for certain contaminated sites (including former firefighting training areas), with pilots using treatment technologies for contaminated groundwater. It also references innovation programmes and investments aimed [redacted] technology development and microcontaminant treatment, including PFAS. For human rights, remediation and innovation are necessary but secondary to prevention: they should not become a substitute for controlling emissions at source, nor should they shift burdens to communities and public budgets where polluters can be identified and held responsible.

(d) Human-rights standards as an organising framework for response measures

Human rights, set out material and procedural standards relevant to the context of PFAS, including adequate norm-setting, preventive and precautionary action, sufficient supervision and enforcement, non-discrimination and equality and procedural guarantees such as impact assessment, access to information, participation, and access to justice.

These standards offer a practical way to assess PFAS governance "end-to-end": whether standards exist and are updated in line with science; whether permits and general rules prevent foreseeable harm; whether supervision and enforcement are credible; whether the public can know what is in their environment and influence decisions; and whether remedies exist if protection fails.

(e) The Dutch duty-of-care framework (Omgevingswet and Bal) as a practical enforcement anchor

Dutch constitutional and statutory duty-of-care concepts provide practical anchors for prevention and enforceability. Article 21 of the Dutch Constitution requires government care aimed at habitability and the protection and improvement of the environment[17]. Within the Environmental planning Act framework, duties of care (including under the Environmental Activities Decree, such as the specific duty of care in Article 2.11) and expectations around, prevention, minimising and the phase out of emissions of substances of very high concern[18] (SVHC) can support precautionary requirements and enforcement logic for PFAS-relevant activities.

Practice demonstrates[19] that prevention-oriented duties depend on effective implementation capacity. RIVM showed that the quality of avoidance and reduction programmes[20] (VRPs) for minimising emissions of SHVC varies considerably, that both competent authorities and companies seek clearer

[15] VEWIN, Dutch Water Authorities (2025) Letter to European Commissioner for Environment, Water Resilience and a Competitive Circular Economy: Call for swift, comprehensive and universal PFAS ban
[16] Ministerie van Infrastructuur en Waterstaat (2025) Reactie op uw brief over PFAS
[17] Grondwet Artikel 21 – Milieubescherming: https://www.nederlandrechtsstaat.nl/grondwet/inleiding-bij-hoofdstuk-1-grondrechten/artikel-21-milieubescherming
[18] Pursuant to Article 57 REACH Regulation and as per OSPAR Agreement 2004-12 List of Chemicals for Priority Action (LCPA)
[19] Rijksinstituut voor Volksgezondheid en Milieu (2024) Verkenning ervaringen met vermijdings- en reductieprogramma's (VRP's) voor de minimalisatie van Zeer Zorgwekkende Stoffen
[20] Pursuant to Article 5.23 and 5.24 of the Environmental Activities Decree

assessment and content criteria, and that competent authorities often lack sufficient technical capacity for consistent review.

7) ACCESS TO JUSTICE AND ACCOUNTABILITY: efforts at securing accountability for entities responsible for causing toxic harm due to PFAS exposure

Dutch human-rights analysis emphasizes the importance of access to information, participation, and access to justice in environmental matters, including clarity on legal routes and effective review mechanisms. For PFAS, this implies proactive publication of monitoring and emission information, accessible complaint channels, and the ability for public-interest organisations and affected individuals to challenge permits, enforcement failures, and inadequate standards.

PFAS has become the subject of pending litigation in the Netherlands, in which a coalition of environmental organisations challenges[21] the Dutch State's overall approach to PFAS, with preliminary judgment expected on 11 February 2026. The case is being heard before the District Court of The Hague and has been presented publicly as the first collective civil action in this field directed at national PFAS policy. This underscores both the substantive duty to protect and the importance of procedural guarantees and effective remedies where harms are alleged. Yet, access to justice, including for environmental organisations, is under pressure with risk to elevated thresholds for bringing public interest cases before courts.

Pending litigation on difficult topics is not a recent development. It reflects the growing attention to the role of the judiciary in ensuring compliance with environmental and human-rights obligations. Political decision-making is prone to stall on complex issues such as climate change, nitrogen and PFAS, and courts are increasingly asked to intervene to ensure adherence to existing legal standards and treaties. This illustrates how judicial action, while sometimes politically sensitive, functions as a safeguard when policy implementation lags, reinforcing the procedural dimension of access to justice in environmental governance.

Conclusion

We would like to thank the Special Rapporteur again for the opportunity to provide input on the situation of PFAS and human rights. We would be happy to provide any additional information and also welcome the opportunity to further discuss our insights and share our experiences. Please feel free to contact Jeroen Oomkens (@agv.nl) to coordinate a meeting.

Sincerely,

Jeroen Haan

Chairman

Dutch water Authorities

Chairman

Association of Dutch water companies (Vewin)

Chairman

Netherlands Institute for Human Rights

[21] Rijksinstituut voor Volksgezondheid en Milieu (2025) RIVM publiceert aangeleverde documenten voor rechtszaak PFAS