January 9, 2026

Dear Special Rapporteur to the Human Rights Council Orellana:

Thank you for this opportunity to submit this comment in connection with your 2026 thematic report to the UN Human Rights Council on PFAS. Communities worldwide face the threat of contaminants like per- and polyfluoroalkyl substances (PFAS), significantly impacting water quality and public health. These highly durable synthetic compounds used by manufacturers with little to no oversight for decades, are now found virtually everywhere, contaminating water, soil, air, food, and indoor environments. PFAS have even infiltrated the water cycle, with research showing that rainwater in most parts of the world contains levels that "greatly exceed" established safety limits. These toxins have been found in the Bogotá River in Colombia and drinking water sources near textile factories in Dhaka, Bangladesh as well as in waters along the coasts of Australia, in the Arctic Ocean, and on Mount Everest. In the United States, government estimates show that nearly every person in the country has PFAS in their blood, and approximately 73 million individuals have contaminated drinking water. Of particular concern to the United States government is the high rates of exposure of communities in or near over 700 military installations that have reported high-levels of PFAS contamination, largely sourced from firefighting foam.

Waterkeeper Alliance is a global movement uniting more than 300 community-based Waterkeeper groups around the world, focusing citizen action on issues that affect our waterways, from pollution to climate change. The Waterkeeper movement patrols and protects nearly six million square miles of rivers, lakes, and coastlines in the Americas, Europe, Australia, Asia, and Africa. PFAS contamination is a concern for Waterkeeper groups worldwide. In the United States alone, more than 100 groups joined our multi-phase monitoring initiative to test surface waters for these chemicals.

I. Introduction and Summary

Humans are exposed to PFAS through our food, water, air, and the consumer products we use. A growing body of scientific evidence has linked these chemicals to serious health consequences such as cancer and endocrine disruptions. New research reveals more about its harmful effects, including that PFAS may weaken immune function in children, causing more frequent infections in babies as young as six months after high prenatal exposure from contaminated drinking water. These 'forever chemicals' are a global environmental and public health crisis due to their extreme persistence, bioaccumulation potential, widespread dissemination, and demonstrated harm to human health and ecosystems. PFAS do not readily degrade, are mobile in the environment, and have entered the atmosphere, waters, soils, food chains, and virtually all human populations worldwide. The *Office of the United Nations High Commissioner for Human Rights (OHCHR) Call for Input* underscores that PFAS contamination can compromise the rights to health, safe water, physical integrity, and a healthy environment.

This submission presents scientific evidence, environmental justice concerns, and policy recommendations aligned with the OHCHR's human rights framework.

II. Research conducted by Waterkeeper Alliance and local Waterkeeper groups demonstrate the prevalence of PFAS in communities disproportionately impacted by environmental injustices

During phase two of its multi-phase PFAS monitoring initiative, Waterkeeper Alliance confirmed the widespread and persistent presence of these toxins in United States waterways, particularly in communities disproportionately impacted by environmental injustice. Local Waterkeeper groups tested surface waters across 19 states, finding one or more types of PFAS in 98% of sampling sites, both upstream and downstream of wastewater treatment plants and in areas where biosolids (treated sewage sludge) are applied to land. Developed in partnership with the Hispanic Access Foundation and participating Waterkeeper groups, samples were collected from surface waters upstream and downstream of 22 wastewater treatment plants and 10 permitted biosolids land application sites. All sites were chosen due their proximity to communities already bearing disproportionate burdens from pollution and climate change.The results were striking: elevated PFAS levels were found at 95% of sites downstream from wastewater treatment plants and at 80% of sites downstream from biosolids-treated land.

Multiple PFAS chemicals were detected in the same waterways, up to 19 different types at elevated levels downstream from wastewater plants and 14 types at elevated levels downstream from biosolids-treated land. Total PFAS levels increased, often significantly, downstream from 17 wastewater treatment plants and six biosolids sites due to the co-occurrence of many regulated and unregulated PFAS at those locations. The phase two report built on the findings of Waterkeeper Alliance's 2022 Phase I monitoring project, which revealed PFAS contamination in 83% of 114 tested rivers, lakes, and streams across the United States.

Further research is needed to fully reveal the scope of PFAS contamination in the United States and around the world; however, regulatory action to protect public health should not wait for every waterway and well to be mapped. For example, United States military sites are often considered a considerable source of PFAS contamination in drinking water, largely due to the historic use of PFAS-laden firefighting foams. It is estimated that nearly 700 U.S. military bases are confirmed or suspected to have PFAS contamination in soil or water. Residents living near many of these bases have reported dangerously high levels in their drinking water since 2017, putting them at risk for serious health issues. Despite this knowledge, the United States government has repeatedly delayed action, including a recent move that pushes remediation back by an average of five years. Some sites face delays of up to a decade, with cleanup at several locations not expected to begin until 2039. PFAS are a recognized problem around the world, but knowledge of an issue is not the same as addressing it with the urgency it requires. Data collection is essential to inform achievable solutions, but it must not become a delay tactic to avoid needed action we can and should take now.

III. PFAS and Human Rights Violations

PFAS contamination rarely affects all populations equally. A 2023 peer-reviewed study from Harvard T.H. Chan School of Public Health found that communities with higher proportions of

Black, Hispanic, and Latino residents face greater exposure to PFAS in their drinking water – a finding supported by Waterkeeper Alliance's own 2025 monitoring data, which detected multiple PFAS at high concentrations in watersheds serving communities with high environmental justice indicators. This pattern reflects broader environmental justice disparities where marginalized groups bear disproportionate toxic burdens. Children and pregnant individuals are biologically more susceptible to PFAS toxicity, and cumulative exposures can amplify harm across lifespans and generations. This contributes to intergenerational inequities and undermines equal protection of fundamental rights. The characteristics and impacts of PFAS implicate multiple human rights as identified by the United Nations' Sustainable Development Goals:

1.) **Right to Good Health**: Ubiquitous exposure and long-term health effects challenge the ability of individuals to achieve the highest attainable standard of health. PFAS contamination undermines prevention, treatment, and health promotion efforts.
2.) **Right to Safe Drinking Water**: Contamination of water systems directly violates the fundamental right to clean, safe drinking water. Many communities lack resources for remediation or alternative supplies.
3.) **Right of Life Below Water and on Land**: PFAS persistence degrades environmental quality, raising fundamental questions about sustainability and intergenerational justice.
4.) **Rights of Reduced Inequalities**: Low-income communities, Indigenous peoples, rural populations, and industrial-site neighbors often face greater exposure, less access to monitoring, healthcare, and remediation, which compounds systemic inequalities and injustices.
5.) **Right to Peace, Justice, and Strong Institutions**: Limited regulatory frameworks, insufficient corporate accountability, and barriers to litigation leave affected communities without effective remedies or compensation.

IV. Regulatory and Policy Recommendations

While some progress has been made, including inclusion of certain PFAS under the Stockholm Convention and targeted bans in some jurisdictions, regulatory approaches remain fragmented and inadequate. National and international responses often address PFAS on a chemical-by-chemical basis, ignoring the collective risk posed by thousands of compounds. A comprehensive approach is needed to protect human rights instead of isolated regulation of a few individual PFAS. Based on scientific and rights-based analysis, the following recommendations are offered:

1.) **Ensure PFAS is regulated by as a class and end non-essential uses.** Regulating PFAS one chemical at a time has led to regulatory waste and repeatedly allowed manufacturers to substitute one harmful compound for another. PFAS must be regulated as a class to prevent this cycle of "regrettable substitution."
2.) **Prohibit the land application of biosolids containing PFAS and other toxic contaminants.** Allowing PFAS-laden biosolids to be spread on farmland is incompatible with protecting drinking water, public health, food safety, and rural livelihoods. As the United States Environmental Protection Agency has acknowledged in its 2025 draft risk assessment on sewage sludge, "land-applying or disposing of sewage sludge containing a detectable level (*i.e.,* 1 ppb or more) of PFOA or PFOS could result in human health risks exceeding the agency's acceptable thresholds for cancer and non-cancer effects."

3.) **Categorically reject PFAS-containing pesticides.** The United Nations should condemn new and existing pesticides that contain PFAS or degrade into PFAS, and move urgently to stop the use of pesticides which contribute to persistent and direct contamination of our water, soil, and food.
4.) **Address PFAS contamination at airports and military sites globally.** In the United States, more than 700 Department of Defense sites are known to be contaminated with PFAS. Global data is lacking as less attention has been paid to contamination at military installations abroad. Airports have also been identified as a source of contamination due to their use of firefighting foam containing PFAS. PFAS-laden firefighting foam must be banned around the world, and action needs to be taken to clean up the contamination that already exists.
5.) **Require transparency and accountability for PFAS production and use.** To sufficiently address PFAS, it must be stopped at the source before it enters the environment and waste streams through multiple pathways. PFAS producers and users should be required to disclose emissions and discharges, monitor environmental and health impacts, and provide funding for remediation, medical monitoring, and compensation for affected populations.
6.) **Foster global cooperation due to the transboundary nature of PFAS contamination**. Countries often lack monitoring and regulatory infrastructures and require support to address contamination, protect populations, and enforce environmental and health safeguards.

VII. Conclusion

PFAS contamination represents a complex environmental and health challenge with profound human rights implications. The scientific evidence demonstrates pervasive exposure, significant health risks, and disproportionate burdens on vulnerable communities. Addressing this crisis within a human rights framework affirms the obligations of States, corporations, international bodies, and civil society to protect environmental health, prevent rights violations, and ensure accountability and justice for affected populations.

Sincerely,

Waterkeeper Alliance