Call for inputs - Visit by the United Nations Special Rapporteur on toxics and human rights to Italy (30 November-13 December 2021)

PFAS CASE IN NORTHEAST ITALY. A Critical Zone for Human Rights

Dear Sir, Marcos Orellana,

We wish to invite you to our territories devastated by **one of the most dramatic pollution situations in the Western world caused by toxic substances** that have entered our bodies through drinking water, food and motherhood.

The western area of the Veneto Region, Northeast Italy, is the place where the third-largest PFASs contamination ever recorded worldwide has occurred (WHO, 2017). However, if we consider the impact on drinking and irrigation waters, it is considered the worst contamination in the world. Here, in the lower Agno Valley, in the Trissino municipality (nearby Vicenza), the Pfas production site of MIT-ENI SpA (Ltd) - a joint venture of Mitsubishi and Enichem - has been active since 1964, providing chemicals to customers worldwide, among which the local leather tanning industry, which represents 35% of the overall European production. The contamination occurred mainly in underground waters which spread over 200 square kilometers and involved at least 350.000 people in 87 municipalities of 3 Provinces through the use of drinking water from the municipal waterworks. Not only, if we take into consideration the contamination of the food chain (the area affected is one of the main agricultural areas of the Italian peninsula) the number of the estimated affected people rises to 800.000. PFOA serum concentrations in farmers residing in the worst impacted areas of the Veneto Region are among the highest found worldwide. Due to the groundwater flow velocities of a few meters/day in the high permeable aquifer of the lower Agno valley, the contaminated water plume is becoming wider and wider.

Per- and polyfluoroalkyl substances, called PFASs - with a very strong fluorocarbon bond - **are the perfect pollutant**: colorless, odorless, tasteless. They have water-repellent, oil-repellent, heat-resistant, surfactant properties. Due to these characteristics they are dangerous for humans and the environment. They do not biodegrade easily and remain unaltered for many years. They are persistent, bioaccumulative, toxic, endocrine disruptors, carcinogens.

Epidemiologic studies have shown **negative effects of the Pfas on human health**, including disruption of steroid hormones; thyroid, liver and kidney disorders and metabolic dysfunctions. PFASs generate cellular toxicity and this could compromise the delicate "brain" of the cell membrane (which is rich in lipids) and cause other fundamental alterations of the immune system, such as the reduction of the response to vaccines, as well as alteration of neurological system.

Especially, PFASs are bio accumulative pollutants and prenatal exposure to PFAS is considered to have an impact on human foetal development and may have adverse long-term health effects later in life. It is no longer acceptable to ignore this amount of data and especially the possibility that these substances could be involved in the increase of neurodegenerative diseases, disorders of neurological development and growth in childhood.

We believe it is also necessary to assess both the **psychological damage** to the young people raised in a social environment characterized by heavy uncertainty and the psychological damage to parents who know that they have fed their children contaminated water and food, not to mention **the tragedy of mothers** who have transferred their blood concentrations of Pfas to their babies through placenta and breastfeeding.

The social costs of PFASs to European society (in terms of damage to human health and of remediation of the contamination) have been estimated in the **tens of billions of euros per year** (EEA 2019). That is the reason why PFAS must be banned without further delay.

The human rights that are violated by Industries and our Institutions - Italian State, Veneto Region, Provinces of Verona/Vicenza/Padua, Mayors of Municipalities - that permitted to produce these substances without effective control and other aspects in the complex matter under consideration are: the **right to life** and the **right to a healthy environment**, but also the **right to an effective remedy**.

The rights just mentioned are protected by some articles of the **European Convention on Human Rights**: articles 2, 8, 10 and 13. At the moment a criminal trial has started in the Court of Assizes against those responsible and co-responsible, but only at the national level. **We call for an international process/trial and attention**.

All documents and studies of a lot of researchers and universities worldwide, especially Padua, you can find in our platform https://pfas.land/ and https://www.mammenopfas.org/

Environmental crime is a social crime and the **multispecies and pluriverse violence** of this crime must not be overlooked. This is our thesis. Changing the approach, changes the world.

Alberto Peruffo (PFAS.land) e Michela Piccoli (Mamme NoPfas) active citizens of contamination area during Life After Oil International Film Festival Villanovaforru, Sardegna, Italy 25th September 2021