PERSISTENT POLLUTANTS

PFOA in rain worldwide exceeds EPA advisory level

Amounts of PFAS in precipitation called "practically irreversible"

by Cheryl Hogue

AUGUST 1, 2022

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Even in remote areas, precipitation contains levels of PFOA higher than the EPA recommends for drinking water, reserachers say.

Rain and snow around the world contain higher concentrations of a toxic, persistent industrial chemical than the US Environmental Protection Agency's advisory level for the substance in drinking water, a new study says (*Env. Sci. Technol.* 2022, DOI: **10.1021/acs.est.2c02765**).

Previous studies show that precipitation in urban, rural, and remote areas of Antarctica and Tibet had more than 0.004 part per trillion (ppt or ng/L), which is the EPA's lifetime exposure health advisory level for perfluorooctanoic acid (PFOA).

The EPA introduced the PFOA advisory level, which isn't a regulatory limit that US drinking water suppliers must meet, in June. The EPA sets such levels as recommendations for when water utilities should notify customers of contaminants. To set the level for PFOA, the agency relied on data linking exposure to this substance to suppression of people's immune responses to vaccines, cardiovascular harm, and interference with the development of fetuses and babies. The EPA plans to issue mandatory limits, which **the Safe Drinking Water Act requires to take into account analytical and economic factors**, for PFOA and five other **per- and polyfluoroalkyl substances (PFAS)** later this year.

"Based on the latest US guidelines for PFOA in drinking water, rainwater everywhere would be judged unsafe to drink," says Ian Cousins, an