ADDRESSING UNREGULATED TOXINS TO PROTECT PUBLIC HEALTH & THE ENVIRONMENT

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EXECUTIVE SUMMARY

Industrial toxins are a threat to our environment and our health — they can pollute the air we breathe, leach into our soils, and contaminate our drinking water. Many of these toxins have been linked to cancer, infertility, and other serious health impacts, yet they remain unregulated in the Commonwealth. Virginia should take action to identify and control sources of unregulated toxic pollution so that all communities benefit from clean air, clean water, and healthy soil.

CHALLENGE

In recent years, concern has grown about industrial toxins that have serious effects on human health and the environment but are not yet controlled by regulatory standards. Per- and polyfluoroalkyl substances (PFAS), a family of thousands of man-made chemicals, represent potent examples of such chemicals. PFAS are toxic, bioaccumulative, and extremely persistent, and for these reasons are commonly referred to as "forever chemicals."[1,2] Studies suggest that human exposure to these chemicals may adversely affect fertility, raise cholesterol levels, and increase the risk of some forms of cancer.[3,4,5] We come into direct contact with PFAS through their usage in items like waterproof gear, food packaging, firefighting foam, and non-stick pans. Concentrated streams of these chemicals can also be released into our environment — including our drinking water — by industries, wastewater treatment plants, and landfills.

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In 2021, the Department of Health is scheduled to complete a study on the toxicity and prevalence of some PFAS in our drinking water.[6] The State Board of Health will then work to establish drinking water standards for PFAS and two other contaminants, chromium-6 and 1,4-dioxane.[7]

Downstream communities, however, too often suffer the health consequences of avoidable pollution and shoulder the costs of removing industrial toxins from their drinking water. Many communities are also exposed to multiple toxic pollutants, and toxic facilities — like landfills, hazardous waste sites, and other industrial facilities — are more often concentrated in low-income communities and communities of color. In regards to PFAS, a study found that low-income communities and communities of color are more likely to live within five miles of a site contaminated by PFAS.[8]

SOLUTION

While drinking water standards are an important component of protecting public health, ultimately this pollution issue must be tackled by addressing PFAS in consumer products, manufacturing processes, and industrial discharges. The Commonwealth should identify and control pathways of PFAS, 1,4-dioxane, and other industrial toxin pollution and put the responsibility on polluters — not communities — to clean up their waste in order to protect public health and the environment in an effective and equitable way.

POLICY RECOMMENDATIONS

Require industrial users to disclose all chemicals released in their discharges as required by the federal Clean Water Act, through Virginia's wastewater permit and industrial pretreatment programs.

Identify and eliminate potential pathways for PFAS contamination, which include: (i) wastewater discharges; (ii) land-applied biosolids; (iii) landfill leachate; (iv) air pollution; and/or (v) food packaging and consumer products.

Ensure that the Department of Health establishes drinking water standards for PFAS, 1,4-dioxane, and chromium-6 that fully protect public health.

Identify other unregulated toxins that may be of particular concern and assess how to control these chemicals in order to protect human health and the environment.