Effects of Per- and Polyfluoroalkyl Substances (PFAS) on Human Health

PFAS is an acronym for a class of more than 9,000 chemicals called per- and polyfluoroalkyl substances. These chemicals share the common trait of having multiple carbon-fluorine bonds, one of the strongest covalent bonds in organic chemistry, making them incredibly persistent. In fact, PFAS chemicals can persist in the environment for such a long time that they are known as “forever chemicals.” Low-level exposures to PFAS are associated with serious health effects. Exposure to PFAS in drinking water is linked with kidney and testicular cancer, ulcerative colitis, adverse reproductive health outcomes, liver diseases, thyroid disease, high cholesterol, and immunotoxic effects.¹ The diagram below summarizes the scientific evidence concerning the effects of per- and polyfluoroalkyl substances on human health.²

The Cost of Inaction and the Benefits of Acting Now on PFAS: 
Pass HB 171/SB 121 to stop further harm from “forever chemicals”

In Alaska, the dispersive use of PFAS-based firefighting foams on military bases and airports has contaminated the drinking water of thousands of Alaskans. PFAS are contaminating groundwater and surface waters, fish, wild game, garden produce and backyard chickens in Alaska. Several Alaska lakes are now closed to fishing because of PFAS contamination. Legislators have the opportunity to take the lead in protecting the health of Alaskans by passing HB 171/SB 121, a bill that would require greater protections for communities by addressing PFAS contamination and preventing further harm. It would also facilitate the transition to safe alternatives that are effective, economical, and in use throughout the world on major airports, military bases, and oil and gas facilities. States are taking the lead to address PFAS and protect the health of their residents—21 states have adopted 72 policies on PFAS and at least 30 states are considering policies on PFAS in 2022, with at least 202 policies under consideration.¹

- Passing HB 171/SB 121 to address PFAS in Alaska is the right thing to do and the time to do it is now. The longer Alaska waits to address this issue, the more expensive it will be. We need to prevent increasing costs of liability and shift the burden from individuals, utilities, local communities, and state government to the responsible parties.

- Some legislators have expressed concern that the cost of cleaning up and managing PFAS contamination in Alaska is cost prohibitive, however there is $10 billion in the federal infrastructure bill to pay for it.² Having legislation in place will demonstrate that our state is prepared to address this issue and help ensure that Alaska receives its fair share of this funding.

- The health, societal, and economic impacts from PFAS contamination are immense and externalized onto individuals, communities, local and state governments. Health-related costs in the U.S. due to PFAS exposure are estimated to be $37-59 billion annually—costs that are borne by individuals, health care providers, and tax payers. Societal costs also include lost wages; lost years of life; reduced quality of life; increased stress, anxiety, and depression; and subsequent impacts on families and communities.³ PFAS contamination can also reduce property values of homes and businesses. Households and businesses can incur costs of purchasing bottled water or to install and maintain water filtration systems.

- The state of Alaska filed a lawsuit last year against 3M Company, E.I. DePont de Nemours and Company and dozens of other firms for their part in releasing PFAS into the environment. However, lawsuit like this can drag on for years - while Alaskans pay the price.

- HB 171/SB 121 prevents further harm and provides protections for the health of Alaskans and our communities. On February 16, 2022, members of the AK legislature held a Senate Resources hearing on SB 121 where Chris Hladick, former EPA Region 10 Administrator, former Commerce Commissioner, former city manager of Unalaska, Galena, and Dillingham said it best during his public testimony when he stated “...It’s gonna cost money...the mitigation piece is going to be difficult...but you’ve got to just chip away at it (PFAS contamination) ...and keep moving.”

² https://www.jdsupra.com/legalnews/infrastructure-act-provides-funding-for-4351723/