

**Senate Bill SB0732 Sewage Sludge Utilization Permits - Per- and
Polyfluoroalkyl Substances - Concentration Limits
Education, Energy, & Environment Committee – February 18, 2025
SUPPORT**

Thank you for accepting written testimony from Kids for Saving Earth (KSE), an organization devoted to providing educational materials and activities for teachers, parents, and children to make their environment healthier.

Introduction

First created in the 1930s and 1940s, PFAS are among a class of more than 14,000 man-made chemicals that contain fluorine atoms bonded to a carbon chain. This carbon-fluorine bond is one of the strongest ever created by man and is rarely seen in nature. PFAS and their complex degradation products remain in the environment for so long that scientists are unable to estimate an environmental half-life.

Humans are exposed to PFAS through many pathways, practices, and products. Although drinking water is the exposure route for millions of people in the USA, inhalation and dermal absorption also contribute to body burden. Some PFAS bioaccumulate, leading to concentrations in animals that are significantly higher than the surrounding environment. PFAS can and do enter the human food chain. Plants can accumulate PFAS from the soil and water.

Health Effects Associated with PFAS Exposure

Immune Function. In 2016, the National Toxicology Program, a federal interagency program that evaluates and identifies the health effects of select substances, determined that PFOA and PFOS are hazardous to the immune system. Adult PFAS exposure has been associated with decreases in antibody production. Exposed children respond poorly to vaccines.

Cancer. PFOA is associated with an increased risk for testicular, ovarian, breast, and kidney cancer. Among men with a first-degree relative with prostate cancer, PFOA and PFOS are associated with increased risk for prostate cancer.

Child Development. Human epidemiology studies show associations between some PFAS and developmental effects. One study showed that PFAS exposure during pregnancy was associated with decreased birth weight and head circumference in males. A recent study of mothers and their babies showed prenatal exposure to PFOS is associated with cognitive effects and decreased ability to regulate behavior in school-age children.

Endocrine Disruption and Fertility. Our endocrine system controls our basic physiology, including metabolism, growth, fertility, and development. PFAS may interfere with healthy hormonal function in the body. Early-life exposure to PFAS may contribute to the development of metabolic diseases, including obesity and type 2 diabetes. Studies of pregnant women show that those with higher prenatal PFAS levels had children with higher body fat cells at age eight. A special concern is that PFAS alter thyroid hormone function that regulates metabolism and growth. Some PFAS decrease fertility and affect the ability to nurse. Animal studies support these conclusions.

Kids for Saving Earth urges your support for a favorable Committee report and passage in the Senate. The goal should be to eliminate all possible exposures to PFAS.