Statewide Testing of PFAS indicates no PFAS Health Concerns in Kentucky’s Public Drinking Water

FRANKFORT, Ky. (Nov. 20, 2019) – The Kentucky Department for Environmental Protection (DEP) has conducted a statewide study for the presence of Per- and poly-fluoroalkyl substances (PFAS) in the treated potable drinking water from municipal drinking water supplies. Based on the results of this study, and when compared to the federal Environmental Protection
Agency (USEPA) health advisory of 70 parts per trillion, it has been determined that there are no evident PFAS health concerns in the Commonwealth’s public drinking water supply.

The four-month testing conducted in 2019 of 81 municipal water treatment plants, which cover about 50 percent of the Commonwealth’s population, showed that all of the samples tested were at non-detectable levels or were well below the federal health advisory level.

Each water treatment plant tested was sampled for eight PFAS related substances, which yielded 648 separate analyses. There were 96 detectable levels of PFAS related substances, of which only 17 (three percent) tested above 5 parts per trillion. None were detected above the safe threshold established by USEPA of 70 parts per trillion.

“This proactive step by the Department for Environment Protection provides us with additional assurance that, based on current science, our drinking water has safe levels of these compounds,” said Energy and Environment Cabinet Secretary Charles Snavely. “Our staff went to great lengths to develop the ability to conduct both sampling and analysis of these contaminants and were able to do this because we have one of the few labs certified to do this in the country.”

The EPA has issued lifetime health advisories for two of those PFAS compounds: perfluorooctanoic acid PFOA at 70 parts per trillion and perfluorooctane sulfonate PFOS at 70 parts per trillion; and a combined PFOA plus PFOS at a combined 70 parts per trillion.

These PFAS compounds have been used since the 1940s for their ability to resist heat, oil, grease, and water. Some of the most common uses have been stain and fire retardants in carpets, non-stick cookware, food bags, some dental floss and aqueous film-forming foam (AFFF) used in firefighting operations. Recently, these substances have been identified as contaminants of emerging concern.

According to the EPA, exposure to PFAS at high enough levels may impact reproductive and developmental health, increase the risk for cancer, disrupt thyroid hormones, and affect the immune system.
The Cabinet will be developing a strategy for continued monitoring, including raw (untreated) water at select stations across the state. Additional testing will also focus on potential upstream sources.

Results of the testing can be found at http://bit.ly/drinking-water-report.