Stow Board of Health provides PFAS information

In response to the recent mailout from the Nashoba Regional School District regarding the discovery of Per and Polyfluoroalkyl Substances (PFAS) in the public water supplies for the Hale Middle School and Center School, the Stow Board of Health would like to provide you with information regarding these contaminants since the citizens of Stow use well water as their primary source of drinking water.

PFAS are fluorinated organic chemicals. Two PFAS chemicals, perfluorooctanoic acid

(PFOA) and perfluorooctanesulfonic acid (PFOS) have been the most extensively

produced and studied of these chemicals. PFAS are contained in firefighting foams,

which have been used in training exercises and to extinguish oil and gas fires at a variety

of locations including airfields. PFAS are also used in a number of industrial processes

and have been used to make carpets, clothing, fabrics for furniture, paper packaging for

food and other materials (e.g., cookware) that are resistant to water, grease or stains.

Because these chemicals have been used in many consumer products, most people have

been exposed to them.

While consumer products and food are the largest source of exposure to these chemicals

for most people, drinking water can be an additional source of exposure in communities

where these chemicals have contaminated water supplies. Such contamination is typically

localized and associated with a specific facility, for example, an airfield at which they

were used for firefighting or a facility where these chemicals were produced or used.

The EPA in 2016 published a drinking water Health Advisory Level for two of the PFAS compounds (Perfluorooctanesulfonic acid [or PFOS], and Perfluoroocatanoic acid [or PFOA]) combined at 0.070 micrograms per liter (ug/L) or 70 parts per trillion (ppt). In June 2018, MassDEP issued an Office of Research and Standards guideline (ORSG) for drinking water of 0.070 ug/L or 70 (ppt) for five PFAS compounds combined. Those compounds are PFOA (Perfluorooctanesulfonic acid), PFOS (Perfluorooctanoic acid), PFNA (Perfluorononanoic acid), PFHxS (Perfluorohexanesulfonic acid) and PFHpA (Perfluoroheptanoic acid. The ORSG was established to be protective against adverse health effects for all people consuming the water for a lifetime and is also applicable to shorter-term exposures of weeks to months during pregnancy and breast-feeding. The MassDEP is considering lowering the above mentioned guideline for drinking water to 0.020ug/L or 20 (ppt)

MassDEP recommends that residents in sensitive subgroups, including pregnant women,

nursing mothers, infants, not consume water when the levels are above 70 parts per

trillion in water.

**Should you test your water?**

Most Stow residents have a private well to provide drinking water to their homes. The Board of Health recommends that all home owners with private wells test their well water (pre-filtration) in accordance with the guideline provided by MassDEP (<https://www.mass.gov/service-details/protect-your-family-a-guide-to-water-quality-testing-for-private-wells>) but always test it if you notice a change in taste, smell, or appearance. In order to determine if your well contains these substances testing is required and the Board of Health recommends the use of a State approved laboratory to conduct the analysis; a list of laboratories can be found in the resources below.

 Additional information regarding PFAS can be found at the following links.

**Resources:**

MassDEP Fact Sheet–PFAS in Drinking Water: Questions and Answers for Consumers

<https://www.mass.gov/files/documents/2019/04/17/pfas-in-dw-fs.pdf>

MassDEP Approved Laboratories for Analysis of Drinking Water for Per- and Polyfluoroalkyl Substances (PFAS) <https://www.mass.gov/files/documents/2019/06/28/PFAS%20testing%20laboratories_0.pdf>

EPA’s PFAS webpage: <https://www.epa.gov/pfas>

MassDEP's Field Sampling Guidelines for PFAS <https://www.mass.gov/doc/field-sampling-guide-for-PFAS/download>