



TOWN OF NORTH READING *Massachusetts*

Department of Public Works

Update on North Reading Drinking Water

There has been considerable information in the news in recent months about the presence of substances known as PFAS being found in drinking water and other sources, including reports of high levels of PFAS contained in leachate from a landfill in New Hampshire being trucked to the Lowell Wastewater Treatment Plant for treatment and disposal in the Merrimack River.

The Merrimack River is the source of water for the Town of Andover, and the Town of North Reading purchases approximately two thirds of its water from Andover in an average year to supplement two wellfields in North Reading, with the highest purchases from Andover being during the summer months.

The Town tested its wellfields in 2014 and 2015, and found Non Detectable levels at that time. While PFAS is not currently a regulated substance that is required to be tested for, in response to the recent reports and as a precaution, the North Reading Department of Public Works tested for PFAS in one of the Town well fields and in the water being supplied to North Reading by Andover using more advanced testing that is now available.

The results of testing conducted in November were returned to the Town on January 2nd, and have been reviewed by Department of Public Works staff in consultation with the Massachusetts Department of Environmental Protection (MassDEP). They show that North Reading's water meets all current United States Environmental Protection Agency (USEPA) and MassDEP standards for PFAS in drinking water.

MassDEP is in the process of updating its regulations, including the standards for PFAS. The levels for one wellfield, at the West Village Water Treatment Plant (WTP), indicate that PFAS levels may slightly exceed the proposed standards. After consulting with MassDEP, the Town is conducting an additional, more extensive round of testing of all its sources of drinking water. The results may not be known for a number of weeks.

Below are answers to frequently asked questions about PFAS:

What are PFAS and where do they come from?

PFAS is the short name for a group of manmade chemical compounds known as Per- and Polyfluoralkyl Substances. These compounds were first developed in the 1940's and began finding widespread use in the 1950's due to their ability to repel water, protect surfaces and resist heat, among other applications. PFAS were widely used for carpet and fabric protectants (Scotchgard prior to 2001) and in making non-stick cookware (Teflon prior to 2013). In the 1960's the U.S. Navy developed firefighting foams containing PFAS.

How do PFAS end up in drinking water?

PFAS can enter the drinking water when there is a potential source of PFAS contamination in the vicinity of the water supply source. Sources associated with PFAS contamination include airfields, fire training areas, manufacturing facilities, waste disposal sites and landfills.

PFAS are resistant to natural breakdown in the environment. Studies indicate that exposure to sufficiently elevated levels of certain PFAS may cause a variety of health effects including developmental effects in fetuses and infants, effects on the thyroid, liver, kidneys, certain hormones and the immune system. Some studies suggest a cancer risk may also exist in people exposed to higher levels of some PFAS.

What are considered to be acceptable levels of PFAS in drinking water?

The USEPA or individual states may establish Maximum Contaminant Levels (MCLs) for drinking water contaminants. There is currently no federal or state MCL for PFAS in drinking water. In 2016 the USEPA established a lifetime Health Advisory for drinking water of 70 parts per trillion (ppt or ng/L) for the total of two of the PFAS compounds. In 2018, the MassDEP issued a public health guideline of 70 ppt for the total of five PFAS compounds in drinking water. The MassDEP has proposed regulations for establishing a MCL of 20 parts per trillion for the total of six PFAS compounds in drinking water.

What levels of PFAS has North Reading found in the drinking water?

Initial testing by the Water Department in 2014 and 2015 found Non Detectable levels of PFAS in the drinking water. Since that time, the ability to detect PFAS compounds at lower levels has been developed. The North Reading Water Department, while not required to, chose to collect additional samples and have them analyzed in November. Based on this testing, the following results have been received:

Compounds	Acceptable Level	West Village WTP	Andover Interconnection
PFOS/PFOA USEPA Health Advisory	70 ppt	16.8 ppt	4.2 ppt
PFOS/PFOA/PFHxS/ PFNA/PFHpA MassDEP Health Guideline	20 ppt <i>(reduced by Mass DEP after January 8th posting)</i>	22.6 ppt	6.2 ppt
PFOS/PFOA/PFHxS/ PFNA/PFHpA/PFDA MassDEP Proposed	20 ppt	22.6 ppt	6.2 ppt

MCL			
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What steps are being taken?

These results are below the current limits established by the USEPA and the MassDEP. The Water Department, in consultation with MassDEP, is in the process of collecting a second set of samples to confirm the initial testing. Additional information regarding test results will be provided as it becomes available.

Is the water safe to drink?

As of January 7, 2020, North Reading's water meets all current state and federal standards.

What happens now?

At the recommendation of MassDEP, the Town is conducting an additional, more extensive round of testing. The results may not be known for a number of weeks. The Lakeside Water Treatment Plant (WTP) has been offline for annual maintenance and was not able to be tested as part of the initial testing round, however it is being tested as part of the more extensive testing. The West Village WTP is being re-tested and was taken offline on January 7th for scheduled annual maintenance unrelated to PFAS. Both water treatment plants are anticipated to remain offline for maintenance until late winter / early spring.

What will happen when the results come in?

The Department of Public Works will review test results with MassDEP and determine the appropriate steps to take. Factors will include what levels the results come in at, which sources, if any, exceed the limits, and the timeline associated with the pending regulations going into effect. Because MassDEP evaluates the average of two tests when making recommendations, if Lakeside WTP exceeds the limit a second test at that location may be required. More information will be provided as soon as it is available.

What if I have more questions?

Please contact the Water Department by calling 978-664-6046 or emailing water@northreadingma.gov.