



Article 12 Well #3 Water Treatment Plant for PFAS Removal



What is Article 12 on the Spring Town Meeting Warrant?

- Article 12 will fund the Final Design Phase of a new water treatment building for the Village Street Water Treatment Plant (WTP), which is served by Town Well #3.
- The new treatment building is necessary to improve water quality and comply with current and future anticipated safe drinking water regulations.
- Millis is in compliance with all current drinking water quality standards. However, the current regulations set a limit for PFAS (per- and polyfluoroalkyl substances) of 20 parts per trillion (ppt). New regulations proposed could lower this limit to 4 ppt. Well #3's PFAS levels have been below 20 ppt but edging closer to it as seen in Figure 1.
- PFAS will be filtered out by large filter vessels in the new facility. See Page 2 for more about PFAS.
- Well #3 is an important part of the Town's water supply. The project will be similar to the D'Angelis PFAS facility under construction for Well #1 and #2. The D'Angelis PFAS facility upgrades are currently on schedule and will be completed during Summer 2023.

What are PFAS?
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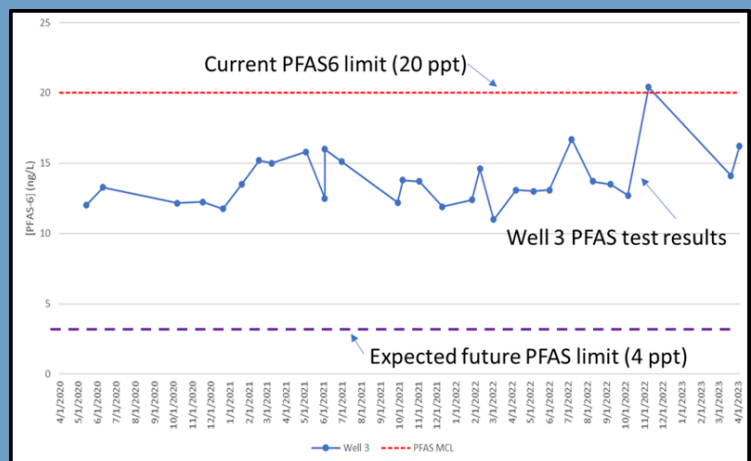
What are the benefits of proposed Village Street PFAS Water Treatment Plant?

- The equipment in the proposed building will be designed to reduce PFAS from Well #3 to non-detectable levels*.
- Extensive pilot testing during Winter/Spring 2023 demonstrated the proposed treatment process will be effective.
- The new building will be designed with extra space for flexibility to expand or modify treatment equipment in the future, if needed.



Clockwise from top left:

1) PFAS filter vessels installed at Well #1 & #2. Similar technology is being designed for Well #3; 2) New PFAS building at Well #1 & #2; 3) PFAS test results data for Well #3. Well #3 was turned off after the elevated December result. Spring testing shows levels have dropped back below to 20.



*For current EPA testing methods

OVER for more info

What are PFAS?

PFAS are a group of numerous human-made chemicals used since the 1950s to manufacture stain-resistant, water-resistant, and non-stick products. Some examples include:



food packaging



non-stick cookware



waterproof clothing



personal care products



fire-fighting foam

PFAS stay in the environment for a long time and do not break down easily. As a result, PFAS may be widely detected in soil, water, air, and food. While consumer products and food are a significant source of exposure to these chemicals for most people, drinking water can be an additional source in communities where PFAS is present in water supplies.

In October 2020, MassDEP set a new drinking water limit for the sum of six PFAS compounds of 20 nanograms per liter (ng/L). This standard is set to be protective against adverse health effects. PFAS limits are not yet set for food or consumer products. In March 2023, EPA proposed a new limit for certain PFAS of 4 ng/L.

How is Millis taking proactive steps to address PFAS?

Building the Village Street Well PFAS plant is a critical part of Millis's ongoing and proactive PFAS Response Plan. Other ongoing actions include:



Frequent testing of the other Town wells to ensure safe levels.



Completing a PFAS Response Action Plan to prioritize and implement treatment at other Town wells.



Working closely with MassDEP during its investigation into sources of the contamination.



Providing transparency in communication – through website updates, presentations, and newsletters – to give residents updates and information on how they can reduce their exposure to PFAS.



Obtaining grant funding to offset costs. Millis has been preliminarily approved for \$3.5M in EPA Grant funding, which will significantly offset the costs of construction.

When will the new Village Street Well #3 PFAS Plant be completed and what will the cost be?

- The Town's engineering consultant recently completed pilot testing and a draft preliminary design. Article #12 will fund the final design and competitive bidding to select a qualified construction contractor. Final design will be complete in Fall 2023. Construction would likely extend from February 2024 through Spring 2025.

More information

Millis Water System PFAS Updates/Details

<https://www.millisma.gov/public-works-highway-department/pages/pfas-drinking-water-information>

If you have additional questions, contact:

- Millis Public Works Director, Jim McKay, (508) 376-7040 or jmckay@millisma.gov

Millis DPW Water System: BY THE NUMBERS

The DPW maintains and operates:

6 wells	>50 miles of pipes
3 water treatment plants	440 hydrants
2 water storage tanks	

The Town of Millis is committed to providing reliable, high-quality drinking water that meets all state and federal safety standards.