

May 15, 2019

Dear Neighbor,

Over the last several months, Tyco has been in the process of evaluating different options to provide for a long-term sustainable supply of clean drinking water for the community in the sampling area:

1. Maintaining POET systems on the existing private wells;
2. Drilling and maintaining individual deep private wells;
3. Establishing and maintaining a new Town of Peshtigo Public Water System;
4. Establishing and maintaining a new Town of Peshtigo Sanitary District;
5. Providing different water supply methods to different residents; or
6. Connect Peshtigo residents to Marinette's existing public water supply.

We have looked at each option thoroughly and it was critical that we chose a solution that would be viable for all Peshtigo residents in the well sampling area. It also had to be a long-term, cost neutral and sustainable solution for residents. We would not select a solution simply because it was the fastest, cheapest, or easiest for the company to implement.

Attached is a document that explains why we believe an extension of the municipal water line is preferable to the other five options; and provides a more detailed look at the advantages of the water line over individual deep wells. As you may know, Tyco will also fully fund all capital costs associated with constructing and installing the water lines.

We'd be happy to discuss the matter with you in more detail. We want to explain why we think this is the best outcome for all affected residents and the community at large. We will be reaching out to talk to as many of you as possible, but in the meantime if we miss you, feel free to contact us at 715-582-7100.

Very truly yours,



Jim Cox
Tyco Fire Products LP

A GLANCE AT THE SIX PROPOSED WATER SOLUTIONS

We evaluated a number of options before determining the best option for a long-term solution was expanding the water supply from the City of Marinette:

1. Installing Point of Entry Treatment (POET) systems at existing private wells: This is an excellent and effective short-term and intermediate-term solution that Tyco currently has in place for 38 wells. However, over the long-term, there are a number of reasons why this option does not work, including the need for a system permanently located in one's home and maintenance and monitoring of the POET system for the life of the well.
2. Drilling deeper (400 or 500 ft.) private individual wells: There are a number of reasons why this is not workable in this situation. The most important one is that we would need this to work for every affected property. This would require more than 160 wells to be installed, and the quantity and quality of that water may not be adequate or acceptable for all those wells. Even if this worked for some residents, it may not for others, which makes this option infeasible.
3. Creating and operating a public water system in the Town of Peshtigo. This would include identification and development of a water source; designing, permitting and building a water distribution system; operating and maintaining a water system; sending and collecting water bills; and more. This would create a significant burden on the Town to own, operate, manage and maintain a water system and therefore is not a feasible option in this circumstance.
4. Buying water from another municipality (likely the City of Marinette). The town would then have to put in place the infrastructure and distribution methods to get the water to residents. Like option 3, this would create a significant burden on the Town to own, operate, manage and maintain a water system and therefore is not a feasible option in this circumstance.
5. A combination of different water supply methods. This includes the above options along with deep wells and POET systems. This option is the least desirable and feasible in our case, and is primarily used when there is no single viable option that can address all of the affected properties. As in options 3 and 4, this would create a significant burden on the Town to own, operate, manage and maintain a water system and therefore is not a feasible option in this circumstance.
6. Connecting Peshtigo residents to Marinette's existing water system: This option best meets every criteria in our situation. It would allow for a reliable and monitored long-term source of water for the residents in the sampling area. It is a solution used elsewhere and would take a relatively short amount of time (two years) to implement.

Deep Wells vs. Municipal Water: A Comparative Guide

There are many reasons why connecting homes to the Marinette water system would be better for the community than a deep well solution. Here are some:

- **Regulated Water Treatment for Public Health** – Municipal water is tested/treated as needed for naturally occurring water quality parameters (e.g., iron, hardness, radium, sulfate) and regulated in accordance with water quality standards. Individual deep wells are not.
- **Operation and Maintenance of Wells and Water Treatment Systems** – Owners of deep wells have the inconvenience of operating and maintaining the well, the pump, and in some cases, water treatment systems. For municipal water, the municipal water utility is responsible for treatment system operation and maintenance.
- **Quality of Deep Well Water** – Documentation from existing deep wells in the general area indicates water quality is questionable with varying levels of iron, radium, sulfate, dissolved solids, and other materials in the deeper aquifer.
- **Short and Long-Term Quantity of Deep Well Water** – Depending on the location and the depth of the well, there may not be enough water available. Even where sufficient quantity exists currently, over time with increased use, the aquifer may yield less water, resulting in some deep wells running dry. The municipal water utility's supply of water is essentially unlimited.
- **Long-Term Monitoring** – A deep well would be required to be continuously monitored, which is inefficient, time consuming and will require continued property access.
- **Regulatory Agencies Approval** – Marinette Water Utility is already an approved supplier of municipal drinking water. However, the process for approval of deep wells would be required by state and local agencies.
- **Cost of Water, Operation and Maintenance** – The annual cost is essentially the same for municipal water vs. deep well/treatment. The average annual cost of municipal water for a typical property owner is approximately \$290/yr. vs. the cost to operate, maintain and eventually replace the deep well system and water treatment systems which ranges from \$100/year to \$600/year.
- **Implementation Time** – The time to implement deep well and municipal water is essentially the same, with either having the ability to be activated before the end of 2020.
- **Capital Costs** – Tyco will pay the higher capital costs to install municipal water to provide a safe and reliable long-term drinking water supply, instead of the lower capital costs for installing deep wells to replace the impacted wells.