New Smart Water Meter FAQ Sheet

- **Why is the city pursuing this initiative if the previous system worked fine?**

  While the previous system may have appeared to function adequately, it relies on outdated technology. Most of our water meters are over 30 years old, well beyond their expected lifespan, this leads to inaccurate readings and significant water loss. Upgrading to smart meters brings us in line with neighboring municipalities that have already modernized their systems.

  The new smart meters eliminate the need for self-reported readings, which have often gone unsubmitted by thousands of residents. This upgrade ensures accurate readings for all households, creating a fair and more efficient billing process. It also significantly reduces the risk of human error, incorrect estimates, and unreported usage.

  In addition to more accurate billing, smart meters support our conservation efforts. They can detect unusual water use and allow the city to alert residents to possible leaks or issues. The system also includes Acoustic Leak Detection technology, which helps locate water main leaks quickly, reducing damage and repair costs.

  Acoustic Leak Detection is a technology that can monitor the water distribution system for signs of leaks. It uses built-in ultrasonic sensors to detect distinct sound patterns caused by water escaping from pipes. Analyzing acoustic data to identify leaks, even small or hidden ones, helps prevent more serious issues like water main breaks. This initiative-taking leak detection helps us reduce water loss, avoid costly infrastructure damage, and prioritize maintenance before problems become critical.

  The use of this technology can save the North Tonawanda taxpayer a significant amount of money. Compared to the old system, the new system is expected to also save the city over $60,000 annually in aspects like postage, material, and labor. The switch to the smart meter system is an important long-term investment for our city.

- **What are smart meters, and how do they work?**

  Smart meters are advanced water meters that automatically and securely record water usage without the need for manual readings. Unlike traditional meters, which require someone to physically check them, smart meters track water usage at scheduled intervals and store the data electronically.

  Billing will remain quarterly, but with the new system, readings are collected remotely. A device installed in a city-marked vehicle will drive through neighborhoods and automatically receive meter readings as it passes each home. This process ensures quick, accurate data collection without needing to enter properties or rely on self-reporting.
  Overall, they offer a more efficient, reliable, and modern way to manage the city's water system.

- **How does the system know it is my meter they are reading and not one of my neighbors?**

  Every unit is assigned a unique number and programmed into a secure system only the city has access to. This number is what the system picks up as readings are being conducted.

- **Will my water bill increase?**

  If you've been accurately reporting your readings, your bill shouldn't change significantly. The smart meter does not raise your rate, but it does provide more precise readings. If your previous meter was underreporting due to age or wear, you might see an increase that reflects actual usage. The goal is fairness; everyone is billed based on their true consumption.

- **Will this increase my taxes?**

  No. The meter system has already been paid for so there will be no increase in your taxes.

- **Can I opt out of the new meter system?**

  No. A smart meter will ultimately be required since the city's system will no longer be able to handle manual readings. Additionally, the water meters are city property, we are simply replacing outdated city equipment.

- **What happens if I do not get the new water meter?**

  There will be a fine of $50 per month for each month the new meter is not installed. Residents should be weary of this a few weeks after receiving their third and final notice.

- **What does the installation involve, and will it cost residents anything?**

  Installation is quick, typically taking about 20 minutes, and is free for residents. You'll need to schedule an appointment and ensure the meter is accessible. If your meter is in a difficult location, the PMI installers are vetted, trained, equipped to handle it, but providing easier access is appreciated if possible.

- **How am I able to schedule an appointment for installation?**

  Cards are being mailed to homes by area. When you receive a card depends on where you live and what section of the region PMI is conducting installations. Each card has a link to a website you may visit and a phone number to call for scheduling. Please do not do so until you have received a card in the mail.

- **What happens if my plumbing is not sufficient for an installation?**

  Though the meter device is equipped to fit various types of units, certain things may prevent installation. If the plumbing is beyond the capability to do an installation, the homeowner will be notified to contact a plumber to fix the issue. Only then can the installation occur. If you have any concerns about your meter setup, please contact waterquality@northontonawanda.org to ensure your setup is suitable.

- **How are smart meters powered?**

  Smart water meters are typically powered by long-life lithium batteries that are built into the meter or its attached transmitter unit. Because the meters are battery-powered, they do not rely on your home's electricity or Wi-Fi.

- **How long will the batteries last?**

  The batteries have a lifespan of about 20 years. When the time comes, the city will be notified of systems running on a low battery and contact the residents to schedule a replacement date.

- **Are they safe if I have any health concerns?**

  Yes. The radio frequency (RF) emissions from these meters are extremely low. For instance, the thermal stress of radio waves from a remotely read water meter is 0.000018 W/m^2, which is significantly below the Maximum Permissible Exposure (MPE) limit of 3.07 W/m^2 defined by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). To put this into perspective, if you were to stand 6.5 feet away from one of these meters continuously for a month, the total RF exposure would be equivalent to a single 1.3-second mobile phone call. These meters are also FCC-approved and comply with all national requirements for electromagnetic emissions.

- **Will I have access to my readings and be alerted when a reading is done and reported?**

  While specific date/time readings won't be available immediately, the Water Department will work toward sharing usage data online. Your invoice will include the readings used for billing. As we gain experience with the software, more features, including access to readings via a resident portal, will become available.

- **Does the city have any control over waterflow with the new meters?**

  No. The smart meters are for readings only. The city has no ability to control the water flow to your home. The only difference from the old system is automated data collection.