



## Frequently Asked Questions

# About Your Water and Sewer Utility Bill



### Why did the Town of Arnprior replace the existing meter system?

Arnprior contracted for the supply and installation of E-Coder R9000i water meters and automatic reading devices in a move to provide more accurate readings, control costs, conserve water and make the reading/billing process more efficient.

Most new E-Coder water meters were installed during the last six months of 2009. Previous to that, new meters with electronic readers were installed in new homes and when meters required replacement.

### How does the new meter reading system work?

Remote sensors are embedded within the E-Coder water meter located in your home/business. The new E-Coder R900i water meter is a one-way communication device that transmits water usage along with leak, tamper, and reverse flow detection information through radio frequency. An employee scans the data from the remote sensors into a hand-held computer through a radio frequency; data is downloaded into Arnprior's water billing system in order to generate your bill.

The process to read all meters takes approximately four hours and will occur four times a year. Previously, the manual process took three to four weeks to complete, four times a year.

Your cost is based on base rates and your water consumption.

The new system can identify continuous or intermittent leaks which when repaired will reduce costs and conserve water.

### Why was my water bill higher than usual?

Here are some of the reasons your bill may have increased:

- The new meter reading and billing system reflects the actual amount of water you use. We say this because some of the meters replaced were very old and they were incapable of tracking all water usage; the new meters record all usage including intermittent or continuous leakage.
- Estimated water consumption vs. actual water consumption: Water bills generated under the manual billing system covering the billing quarters for September 2009, December 2009 and March 2010 were based on estimated water usage as part of the transition from the manual reading/billing system to the automated system. The August 2010 billing was based on actual consumption from the start of the new metering to July 28, 2010, less a credit for the estimated consumption charges. In some cases, the August 2010 billing was higher because previous bills were based on lower estimates.

- If the estimated billings equalled the actual consumption registered by the new meter system, the August 2010 billing showed an increase because it covered a four-month period instead of the usual three-month period.
- You may have a leak. The new meters detect continuous or intermittent leaks; staff will be recommending a process and policy to Council to assist water customers to deal with these leakage issues.
- Certain types of older meters had outside readers as well. In some cases, the outside reading is lower than the reading produced by the inside meter, causing a discrepancy in the calculation to close out the old meter.
- We have found discrepancies in some accounts as a result of meter reading/recording and estimating under the old system. As part of our review, we have hired KPMG to provide a third party, independent audit of the old and the new billing system and process – a task to be completed as soon as possible. We ask for your patience as we verify these anomalies through this audit and determine how they affected the final balance generated by the old water meter billing system. Once we have this information, we will be in the best position to provide you with the answers you need about your bill including any adjustments.

### Why were meter readings estimated for the billing quarters ending September 2009, December 2009 and March 2010?

New meters were installed by the end of December 2009 and we were looking forward to issuing bills generated by the new automated meter reading system. Our accounting software vendor had assured us that the software programs were compatible; bills issued for the billing quarters ending September 2009, December 2009 and March 2010 were based on estimates as we tried to work through incompatibilities between the existing municipal accounting software package and the new E-Coder water meter software. The incompatibilities could not be resolved. We sought bids using a request for proposal process for a new accounting software

package. Once purchased and installed, the priority was to have the new water billing system up and running in time for the July 2010 billing deadline.

### How did you make the transition for billing from the manual system to the automated system?

Most water customers had their water meters changed out to the new meters starting in August 2009 and throughout the fall of 2009.

The Balance Forward amount on your bill includes any arrears from previous billings not yet paid as of the billing date along with an adjustment calculating a final billing for the old meter. As the old utility billing program could not be modified to accommodate the switch over to the new meters, the old meter final billing had to be calculated separately and input into the new system as a balance forward on all the accounts using the following formula.

#### *Calculation of the Balance Forward adjustment to close out old Meter:*

Final Reading minus the Estimated Reading billed March, 2010 multiplied by the combined Water and Wastewater consumption rates in imperial gallons. In most cases this resulted in a credit balance forward and varies depending on the how closely the estimated billing was to actual consumption and when the meters were replaced.

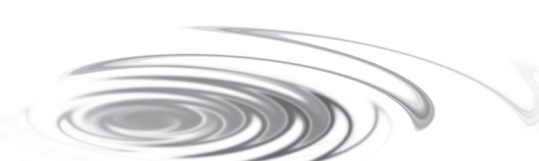
#### *Calculation for Accounts that already had new meters installed: new homes or recent meter replacements.*

Those that already had new meters in place, received a credit for all consumption up to the last estimated billing, to set the consumption balance forward to zero; the billings for these meters were converted to imperial gallons until all of the new meters were installed.

As of the August 2010 billing, all readings are reported in metric.

### What are the benefits of the new water meter system?

- New meters are more accessible. Previously, staff either read the meters as part of a door-to-door process or if necessary, scheduled appointments to access meters most often located in basements or crawl spaces. Under the old system, when readings could not be taken because of difficulties in scheduling appointments, those residents were requested to record and call the Town of Arnprior to report their meter readings.



- Readings are actual readings, not estimates. Actual readings will reflect true costs. These readings will also help us draw comparisons of the water output from the water filtration plant and total consumption. That information will help us identify and deal with water loss – a significant issue for most Canadian municipalities. The Town and water users will have accurate information on which to base successful conservation efforts. Identifying and dealing with water loss ultimately will increase the life of water and sewer infrastructure.
- The manual process of reading, reporting and recording is replaced with a more efficient and more accurate, automated process.
- New meters detect continuous or intermittent leaks; owners will be advised by letter and provided with information on how to confirm the location of the leak(s).
- There is an ability to monitor reverse flow/backflow events.

### How can I take a reading from my water meter myself?

In order to maximize the life of the water meter's internal battery, the LCD display on the new Neptune E-Coder R900i water meters remains off until activated with a light.

1. Using an ordinary flashlight, shine the light over the "light sensor" hole on the face of the meter for a few seconds.
2. Once activated, the LCD display will alternate every six seconds from displaying the current meter reading to the current rate of flow.

### What units of measurement does my water meter register?

The E-Coder R900i water meter records consumption in m<sup>3</sup> (1000 litres), and on a standard residential 5/8" diameter water meter, will register the volume of water used down to 0.0001m<sup>3</sup> (100ml).

### Has my water meter been tested prior to installation?

All water meters are tested to meet or exceed the latest AWWA C700 Standard. AWWA is the governing body for water and water meter related standards across North America.

### How do I identify the cause of an intermittent or continuous leak and what can I do about it?

The new automated meters and data recordings have the ability to identify intermittent or continuous flows but cannot pinpoint the source.

To check to see if your home has a water leak you can either read your meter before retiring for the evening and read it again in the morning to see if the reading changed or turn off all fixtures and appliances that use water and check the meter to see if there is any flow registering.



#### Toilet leaks

- A leaking toilet can waste up to 400,000 litres (400 cubic metres or 88,000 gallons), or the equivalent of around \$1,000.00 per year!
- Flapper valves function as a gasket between the toilet tank and bowl and are the most common source of a toilet leak. Flapper valves can sometimes fail and release a steady flow of water from the toilet tank to the bowl.
- To check to see if you have a leaking toilet tank, place dye tablets or a little food colouring into the tank. Wait 20-30 minutes; if there is colour in the bowl, then you know you have a leak.

#### Other places for leaks - faucets and showerheads.

- You may not notice faucets or showerheads leaking if the leak is small. To check for leaks, make sure the sink or tub is dry, insert the plug into the drain, wait, check the sink or tub from time to time to see if water starts to pool in the sink or tub.
- Don't forget to check all bathrooms, the kitchen, outside taps and sprinkler systems as well as water pipes and connections inside your home/business.

A steady drip can waste up to 55 litres (12 gallons) in just 24 hours.

### How can I ensure my water meter is working?

Check your meter reading before you leave your home and upon your return. Before you leave, make sure there are no appliances using water. You have a leak somewhere in the house if the meter shows a higher reading at the end of the day.

If no leaks are detected, perform the bucket test. Record the meter reading. Ensure no water is being used elsewhere in the house. Fill your bucket with 5-10 litres of water and check the meter again to verify the meter is registering accurate water usage.

### When will I receive my next bill?

Bills will be issued:

- in November 2010 for the August, September & October 2010 period;
  - at the end of December 2010 for the November & December 2010 period.
- Regular billing based on quarterly billing:
- resumes in March 2011 for the January, February & March 2011 period;
  - the June 2011 billing covers the April, May & June 2011 period.

### When did you convert billing from imperial to metric?

As of August 2010, all bills are calculated using metric rates because the new water meters record consumption in cubic meters. Water and sewer rates are posted on our web site: [www.arnprior.ca](http://www.arnprior.ca)

#### Conversion Table

- 1 imperial gallon = 0.00454609 cubic meters
- 1 cubic meter = 219.9692483 imperial gallons
- 1 imperial gallon = 4.54609 litres
- 1 litre = 0.2199692483 imperial gallons
- 1 litre = 0.001 cubic metres

### What was the 2010 increase in water and sewer rates?

Council approved a water and sewer rate increase of 4.9% for 2010 effective January 1, 2010.

### What do the water and sewer rates fund?

Provincial legislation requires every municipality to undertake a long-term financial plan based on an inventory of water and sewage infrastructure, preparation of an Infrastructure Management Plan and identification of all life cycle costs and revenues related to source protection, operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water, and an outline on how the municipality intends to pay for the full cost of these services. This process is well underway.

The property tax base no longer subsidizes water and sewer initiatives. All operational and capital costs associated with water and wastewater in Arnprior are fully recovered through the water and sewer rates. Your water and sewer rates are based on an updated long range water/sewer financial plan originally prepared by CN Watson. Priorities are reviewed during annual Town of Arnprior budget deliberations.

The next step is to plan and fund lifecycle costs associated with the replacement of current water and sewer infrastructure.

### Where can I pay my water and sewer bill?

Make your cheque payable to the Town of Arnprior and mail it or drop in to our offices: Town of Arnprior, 105 Elgin St.W., Arnprior, ON K7S 0A8. The bill can be paid at any bank or through Telebanking: Royal Bank, Scotia, TD, Canada Trust and CIBC.

### More questions?

If you have any questions or concerns, please get in touch with our Finance Department Monday through Friday at (613) 623-4231 or via e-mail at [finance@arnprior.ca](mailto:finance@arnprior.ca). You can also visit our website at [www.arnprior.ca](http://www.arnprior.ca)