

<u>The Town of Fort Frances</u>	SECTION OPERATIONS & FACILITIES
<u>STANDARD OPERATING PROCEDURE</u> <u>NO. 3 FOR WATER MAIN BREAKS AND</u> <u>REPAIRS</u> <u>POLICY</u>	NEW: December 2004 REVISED: June 2009, December 2009, June 2012
Resolution No. 634 (consent) 06/12	Supercedes Resolution No. 371 (Consent) 12/09
Policy Number: 4.15	PAGE 1 of 5

1. PURPOSE:

In the event of a water main break, Town Employees will adhere to the following policy.

2. RESPONSIBILITY:

All individuals in the Operations & Facilities Division workforce, at all levels and functions, which are responsible for providing and delivering water services to the community.

3. PROCEDURE:

- A. Once the Operations & Facilities Manager or his designate is notified that there is a possibility of a water main break, he/she will notify the Environmental and Facilities Superintendent in-charge of the possible break.
- B. The Environmental and Facilities Superintendent will direct the Water Distribution System Operators to isolate the water distribution system by turning the main line isolation valves to the "off " position above and below the break area.
- C. An inspection of the break site will occur with the Environmental and Facilities Superintendent and the Water Distribution System Operators to assess the situation and develop a work plan to address the break. Such items to be discussed are; the size of work crew, equipment requirements, notification requirements and necessary materials etc.
- D. Once the work plan has been finalized, immediate notification of the situation and disruption of service to the affected customers will take place. The work crew will deliver the "Notice To Water Customers" form to the customers.
- E. The Environmental and Facilities Superintendent/Water Distribution System Operator will notify the Water Treatment Plant Senior Operator of the break situation. The contact numbers are as follows; regular business hours – **274-2325**, after hour cellular number – ORO is 275-8733 or Alternate ORO – 275-5215.

- F. Either the Environmental and Facilities Superintendent or the Water Distribution Operator will contact the Public Utilities for locates prior to excavating the break. The contact numbers are as follows;
- i. Ontario-1-Call 1-800-400-2255 (Union Gas, FFPC, Bell & Ontario Hydro, EFG Gas Transmission Company))
 - ii. Shaw Cable (TV) – 274-5522 (not part of Ontario-1-Call)
 - iii. TBay Tel – 684-8344 (not part of Ontario-1-call)
- G. Prior to excavating, the Environmental and Facilities Superintendent will personally notify:
- The Northwestern Health Unit (NWHU) – **1-807-274-9827** by telephone when customer will be without water or when there is a potential for cross contamination.
 - The Ministry of the Environment, Kenora Area Office – **1-807-468-2718** by telephone when customer will be without water or when there is a potential for cross contamination.
 - The Ministry of Labour by telephone (**1-800-461-7268**) or by fax (**1-807-475-1646**) of the excavation and obtain an excavation authorization number.
- H. If traffic is to be effected during the repair, the Water Distribution System Operator shall put together a Traffic Protection Plan in accordance with Book 7 of the Ontario Traffic Manual (OTM). Contact is to be made with the following if the roadway is to be closed:
- i. Fire Department – 274-9841
 - ii. Ambulance – 274-3261 or 1-800-463-7502
 - iii. Police (OPP) – 274-3322 or 1-888-310-1122
- I. Communication to the Public by means of announcements on the local radio station, B 93.1 FM to inform the citizens of the situation and to avoid the work area where possible.
- J. Once all notifications, locates and approvals are in place, the necessary equipment and labour will be assembled at the break site.
- K. Commence excavating the break.
- L. Expose the break in the water distribution system to determine what repairs, parts or materials are required.
- M. Prior to cutting or disconnecting any parts on the existing water distribution system, the exposed piping will be thoroughly cleaned to ensure that it is free of soil, foreign materials or any contaminates. If for some reason the existing piping has been exposed to wastewater (raw sewage) the piping will be completely disinfected using straight Javex (minimum 6% Sodium Hypochlorite) prior to disassembling the piping.
- N. Once all the repair parts have been determined they will be disinfected using Javex (minimum 6 % Sodium Hypochlorite). Once disinfected, the parts will be stored in sealed plastic bags to ensure no contamination occurs. The parts will be removed from the sealed bags in the bottom of the excavation once they are ready to be installed.

- O. Workers will prevent contamination of the existing piping and repair parts by using rubber or latex gloves.
- P. Once the repair is complete, all users downstream of the break will be officially notified using a standardized notification form that their property has been put on a Drinking Water Advisory until water results are received indicating the water is safe for consumption.
- Q. The isolated section of water main is to be flushed by discharging water from the nearest fire hydrant. Water will be discharged from both sides of the break. Each side will be flushed independently of the other to ensure no isolated water is allowed to be contained in the system prior to putting the water main back into service.
- R. Four (4) water distribution bacteriological samples will be taken by the Water Distribution System Operator/Water Treatment Operator immediately at the break area in the system;
 - i. Upstream of the break section
 - ii. Downstream of the break section
 - ii. Two at the nearest services to the break.

The water samples will be sent to an accredited laboratory for analyzes. Presently, the accredited laboratory is ALS Laboratory Group in Thunder Bay.

Note: Two consecutive sets of samples collected minimum of 24 hours apart must test “negative” for bacteria before the drinking water advisory is lifted.

- S. Once water samples are received indicating that the water is safe for consumption, the customers who received the initial advisory will be officially notified, “Lifting of the Drinking Water Advisory” form that the water is safe for consumption.
- T. All pertinent information regarding the break will be logged by the Water Distribution System Operator in the water distribution logbook. Also, information will be recorded in the GIS database.

References:

Standard Operating Procedure for Flushing of Water Mains..... Policy No. 4.7
Standard Operating Procedure for Disinfection of Water Mains..... Policy No. 4.8
Standard Operating Procedure for Bacteriological Testing of Water Mains..... Policy No. 5.0
AWWA Standard for Disinfecting Water Mains.....C651-99

EFFECTIVE STARTING: _____
DRINKING WATER ADVISORY (DWA)
Town of Fort Frances Public Works

This Drinking Water Advisory is issued as a **precautionary measure** due to the repairs on the water distribution system, which may have allowed the possibility of the water distribution system to become contaminated. An advisory does not mean that the water is contaminated, but rather that it could be contaminated; the water quality is unknown, customers should assume that the water is unsafe to drink and take the following appropriate precautions:

1. Once water pressure is returned, please run your cold water tap to remove all discolouring. Please refrain from washing clothes/dishes and bathing during this period of time or until the water is clear.
2. Boil all water vigorously for at least one full minute prior to using for drinking or cooking (the minutes start when the water begins to bubble); wait for the water to cool before using it, or store it in the refrigerator in a clean container. Boiling removes harmful bacteria in the water that may cause illness. You should throw away ice made during the time of the advisory as freezing does not kill the bacteria.
3. Boil water to be used for other activities where it may be ingested, including:
 - a. brushing teeth or soaking false teeth
 - b. washing fruits and vegetables
 - c. food or drink which will not be subsequently boiled
 - d. ice cubes
 - e. water for pets

Water samples have been taken near the break site. These water samples have been sent to an accredited laboratory (ALS Laboratory Group in Thunder Bay) for analysis. Once the results from the laboratory analysis have confirmed that the water is safe for consumption, affected customers will be notified. Notification of test results may take approximately five (5) business days.

If you require any additional information, please contact the following:

Douglas Herr,
Environmental and Facilities Superintendent
Town of Fort Frances, Public Works
807-274-9893
after hours trouble line: 807-274-9516

Date Issued:

LIFTING OF THE DRINKING WATER ADVISORY
Town of Fort Frances Public Works

The Drinking Water Advisory issued as a precautionary measure due to repairs on the water distribution system has been lifted.

Water samples previously sent in to an accredited laboratory (ALS Laboratory Group in Thunder Bay) for analysis has confirmed that the **water is safe for consumption.**

Prior to resuming normal day to day water activities, you should do the following:

1. Run cold water faucets for one (1) minute before using the water.
2. Run drinking water fountains one (1) minute before using the water.
3. Flush all garden hoses by running cold water through them for one (1) minute.
4. Run water softeners through a regeneration cycle.
5. Drain and refill hot water tanks.

Thank you for your co-operation in regard to this matter.

If you have any questions or require additional information please contact the undersigned.

Douglas Herr,
Environmental and Facilities Superintendent
Town of Fort Frances, Public Works
807-274-9893
After hours trouble line: 807-274-9516

Date: _____

Time: _____