



Municipal Water Utility OVERSIGHT



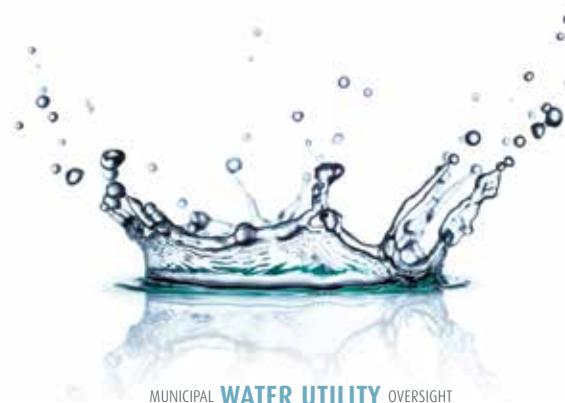
Government oversight of
**municipal
water
utilities**
is provided by
two
government agencies:

Nova Scotia Environment

- regulates water safety issues;

Nova Scotia Utility and Review Board

- regulates water rates.



Responsibilities of Nova Scotia Environment

In 1995 when the *Environment Act* was first proclaimed, Nova Scotia Environment was identified as the lead agency for water resource management. This leadership responsibility was maintained when the Act was amended in 2006 and 2012. The water resource management mandate is delivered by two divisions – the *Compliance Division* and the *Science Division*.

The *Compliance Division* is responsible for the majority of field operations relating to environmental protection. Activities in this Division include:

- processing applications;
- issuing approvals – for water supply, treatment and/or distribution system operation, construction and water withdrawals;
- classifying water and wastewater treatment systems, water distribution systems and wastewater collection systems;
- inspection and monitoring of approvals;
- enforcement activities and response to public issues and complaints.

All inquiries from municipalities regarding their approval to operate should be directed to the local office administering the approval. A list of offices is available on the internet at: www.gov.ns.ca/nse/dept/division.emc.asp.

The *Science Division* is responsible for developing and implementing plans, standards, guidelines, and policies for the management and protection of Nova Scotia's water resources. This includes providing technical support to the Compliance Division for program delivery. The Science Division is also responsible for certifying operators that operate classified water and wastewater treatment systems, water distribution systems or wastewater collection systems.

The authority to issue municipal water approvals (to operate and construct) and water withdrawal approvals comes from the *Activities Designation Regulations* under the *Environment Act*. The authority to classify water and wastewater systems and require monitoring of water quality comes from the *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations*.

In the event of a waterborne outbreak, Nova Scotia Environment becomes a member of the outbreak team which is led by the Department of Health and Wellness.



Responsibilities of the Utility and Review Board

Pursuant to the *Public Utilities Act*, the Nova Scotia Utility and Review Board (“UARB”, or “Board”) exercises general supervision over all water utilities operating as public utilities within the Province. This authority includes setting of rates, tolls and charges, fire protection charges, rates and regulations for the provision of service and approval of capital expenditures in excess of \$250,000. In addition, the Board is authorized to deal with any other matters, including complaints, the Board feels are necessary to properly exercise its mandate. The *Public Utilities Act* allows the recovery of all reasonable and prudent operating expenses, annual depreciation expense, and a return on rate base which is deemed to be just and reasonable.

There are approximately 60 regulated water utilities, all of which are either owned and operated by a Municipality or a separate Commission. Each utility has schedules of rates and regulations approved by the Board. The Board must approve all amendments to these schedules which generally requires a public hearing.

When approving capital expenditures, the Board assesses, among other things, the need for the proposed project, the reasonableness of the expenditure, and the financial impact on the utility and its customers.

When a customer complaint is investigated, the focus is on whether the regulations, as approved by the Board, have been followed on a fair and equitable basis.

While the Board has an indirect role in the regulation of the safety and adequacy of service provided by a public utility, Nova Scotia Environment is the entity which has the responsibility to ensure the safety and quality of water consumed by the public. The focus of the Board’s regulatory power over water utilities is to ensure sound management and the provision of reasonably safe and adequate service at just and reasonable rates.

Board policy requires a decision to be issued within 90 days from the date of last filing, subject to unusual circumstances. Under the *Utility and Review Board Act*, decisions may be appealed to the Nova Scotia Court of Appeal on any question of jurisdiction or law, within 30 days from the date of the Board Order.



Responsibilities of the Owner of a Municipal Water Utility under the Environment Act

The *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations* place three duties on the municipal water utility:

REGULAR TESTING – Section 33 of the *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations* requires an owner of a public drinking water supply to regularly monitor drinking water quality for the parameters listed in the *Guidelines for Monitoring Public Drinking Water Supplies*, as well as other substances as may be required by the Minister or an Administrator. Samples are to be collected in the manner and with the frequency set out in the *Guidelines for Monitoring Public Drinking Water Supplies* or as required by the Minister or an Administrator.

Drinking water quality testing is to be completed by approved laboratories in accordance with the *Policy on Acceptable Certification of Laboratories*.

IMMEDIATE NOTIFICATION AND CORRECTIVE ACTION – Section 34 of the *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations* requires an owner of a public drinking water supply to:

- notify the department immediately upon becoming aware of not meeting health-related drinking water quality criteria; and
- take corrective action as set out in the *Guidelines for Monitoring Public Drinking Water Supplies* or as may be required by the Minister or Administrator.

PROVISION OF SAFE DRINKING WATER – Section 35 of the *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations* requires that an owner of a public drinking water supply ensure that the microbiological, physical and chemical characteristics of a public drinking water supply do not exceed the maximum acceptable concentration (MAC) or interim maximum acceptable concentration (IMAC) for substances listed in the most recent version of Health Canada's *Guidelines for Canadian Drinking Water Quality*, as amended from time to time.

The *Guidelines for Monitoring Public Drinking Water Supplies* are considered to be minimum requirements under the *Water and Wastewater Facilities and Public Drinking Water Supplies Regulations*. Any conditions to an operating approval that the municipal water utility has or may require will always take precedence.

Owners of municipal water utilities are also responsible for applying for a water withdrawal approval and for ensuring the approval remains valid for the life of the water utility.

Owners of municipal water utilities are responsible for complying with all terms and conditions of their operating approval. Specific terms and conditions are included, but not limited to: source water protection, treatment, operations, monitoring, recording and reporting. This includes immediate, annual and ad hoc reporting functions as outlined in Appendix 1. There are also requirements to provide information upon request or for inspection or review as outlined in Appendix 2.

Responsibilities of the Owner of a Municipal Water Utility under the Public Utilities Act

Owners are required to ensure that the utility has sufficient financial resources necessary to operate in a manner which does not create deficits. As per section 52 of the *Public Utilities Act*, the utility is required to provide service and facilities which are reasonably safe and adequate and in all respects just and reasonable. The utility's operations include maintaining source of supply structures, pumping equipment, treatment and storage facilities, as well as transmission and distribution mains, hydrants and valves and other associated appurtenances.

Owners are required to follow the requirements for accounting, financial and operational reporting as set out in the *Water Utility Accounting and Reporting Handbook*. This includes the filing of an annual report which is comprised of two separate sections dealing with (1) financial and (2) operational compliance. The financial section includes the filing of audited financial statements, three year capital budgets and three year operating budgets. The operational compliance section includes a certificate stating that all provisions of the *Water Utility Accounting and Reporting Handbook*, as well as all other regulations regarding the operation of a water utility have been met.

FOR MORE INFORMATION

Nova Scotia Utility and Review Board

Mailing Address: PO Box 1692, Unit "M", Halifax, Nova Scotia, B3J 3S3, board@gov.ns.ca,
Web www.nsuarb.novascotia.ca

Office: 3rd Floor, 1601 Lower Water Street, Halifax, Nova Scotia B3J 3P6, Tel: (902) 424-4448, Toll free: 1-855-442-4448, Fax: (902) 424-3919

Nova Scotia Environment - Local Offices:

NORTHERN REGION - Truro

36 Inglis Place
Truro NS B2N 4B4
Tel: (902) 893-5880
Fax: (902) 893-0282

NORTHERN DISTRICT - Amherst

71 East Victoria Street
Amherst NS B4H 1X7
Tel: (902) 667-6205
Fax: (902) 667-6214

NORTHERN DISTRICT - Antigonish

155 Main Street, Suite 205
Antigonish NS B2G 2B6
Tel: (902) 863-7401
Fax: (902) 863-7411

NORTHERN DISTRICT - Pictou

R.R. #3, New Glasgow
(courier: 20 Pumphouse Rd, Granton)
New Glasgow NS B2H 5C6
Tel: (902) 396-4194
Fax: (902) 396-4765

EASTERN REGION - Sydney

1030 Upper Prince Street
Suite 2
Sydney NS B1P 5P6
Tel: (902) 563-2100
Fax: (902) 563-2387

EASTERN DISTRICT - Port Hawkesbury

218 MacSween Street, Suite 12
Port Hawkesbury NS B9A 2J9
Tel: (902) 625-0791
Fax: (902) 625-3722

CENTRAL REGION - Bedford

30 Damascus Road
Suite 115
Bedford NS B4A 0C1
Tel: (902) 424-7773
Fax: (902) 424-0597

WESTERN REGION - Kentville

136 Exhibition Street
Kentville NS B4N 4E5
Tel: (902) 679-6086
Fax: (902) 679-6186

WESTERN DISTRICT - Bridgewater

60 Logan Road
Bridgewater NS B4V 3J8
Tel: (902) 543-4685
Fax: (902) 527-5480

WESTERN DISTRICT - Yarmouth

13 First Street
Yarmouth NS B5A 1S9
Tel: (902) 742-8985
Fax: (902) 742-7796



APPENDIX 1:

IMMEDIATE, ANNUAL AND AD HOC REPORTING REQUIREMENTS

A) IMMEDIATE REPORTING REQUIREMENTS

Municipal water utilities shall immediately notify Nova Scotia Environment when the following occurs:

- a) whenever the presence of bacteria is detected;
- b) upon receipt of results that indicate a maximum acceptable concentration or interim maximum acceptable concentration has been exceeded;
- c) lack of disinfection or failure of key water treatment process;
- d) inadequately disinfected water being directed to the water distribution system;
- e) use of emergency water supply from an untreated or inadequately treated source;
- f) a serious incident of raw water contamination;
- g) when it is necessary to use a by-pass;
- h) when it is necessary to use a back-up water supply;
- i) any incidents of non-compliance with the Approval to Operate;
- j) any other incident that may adversely affect the quality of water within the system (including line breakage that may result in cross contamination);
- k) if the chlorine residual in the water distribution system is less than stipulated;
- l) for groundwater under the direct influence of surface water (GUDI) - if the GUDI status of a well changes.

B) ANNUAL REPORTING REQUIREMENTS

Municipal water utilities shall comply with the following annual reporting requirements.

By April 1 of each year - Annual Report

Municipal water utilities shall prepare and submit an annual performance report to Nova Scotia Environment. The annual report shall contain, but not be limited to, the following information on the form provided by Nova Scotia Environment:

- a) a summary and discussion of the quantity of water supplied during the reporting period on a per month basis showing design values, maximum daily flow and average daily flow for each month and any other parameters or conditions specified in the Water Withdrawal Approval;
- b) a summary and interpretation of analytical results obtained in accordance with the monitoring and recording section of the Approval, including an explanation for any exceedence of the maximum acceptable concentration (MAC) or interim maximum acceptable concentration (IMAC) of health-related parameters listed in the *Guidelines for Canadian Drinking Water Quality*, latest edition and the actions taken to address the exceedence;

- c) annual trend graphs for parameters that are continuously monitored;
- d) date and description of any emergency or upset conditions which occurred during the period being reported upon and action taken to correct them;
- e) any modifications to the contingency plan or emergency notification procedures, including a description of how the information was communicated to staff;
- f) a list of the names of each laboratory utilized and the parameters analysed by each lab;
- g) an update on the status of the source water protection plan, including any modifications to the plan or implementation schedule, and a summary of activities taken to achieve the goals and objectives of the plan;
- h) all incidents of chlorine residual below the stipulated value with a description of actions taken;
- i) verification that the operational conditions remained within the design range for achieving CT; if operational conditions went outside the design ranges, CT calculations must be provided with a summary of corrective actions taken;
- j) records of any violations of the conditions of the Approval and actions taken by the Approval Holder to correct those violations;
- k) any complaints received and the steps taken to determine the cause of complaint(s) and the corrective measures taken to alleviate the cause and prevent its recurrence;
- l) a review of the QA/QC program to validate the measurements obtained from continuous monitoring equipment and for all analyses tested on site or by a non-certified laboratory;
- m) a list of each certified operator and their level of certification.

By October 1 of each year - Annual Monitoring Program

Municipal water utilities shall prepare and submit an annual sampling plan to Nova Scotia Environment. The annual sampling plan shall recommend a monitoring program for the following year, highlighting any changes and the reason for the change. The annual monitoring program shall include:

- a) compliance monitoring, including QA/QC requirements;
- b) process monitoring;
- c) response monitoring;
- d) special process characterization and optimization monitoring (if applicable);
- e) source water characterization/protection monitoring.



c) AD HOC REPORTING REQUIREMENTS

Municipal water utilities shall notify Nova Scotia Environment when the following occurs:

- a) when any extensions or modifications are proposed which are not granted under the existing approval to operate - this includes process changes or waste disposal practices;
- b) whenever the Approval Holder becomes aware of any new or relevant information respecting any adverse effect that actually results, or may potentially result, from any activity to which the Approval relates;
- c) if sampling is changed such that a sample is analysed by a laboratory that does not meet the Department's *Policy on Acceptable Certification of Laboratories* (excluding those parameters that are allowed by the Approval to be tested on site or by a non-certified laboratory);
- d) if modifications to the sludge disposal plan are proposed;
- e) if a sampling location is proposed to be moved or re-located.

APPENDIX 2:

INFORMATION TO BE PROVIDED UPON REQUEST OR FOR INSPECTION/REVIEW

A) UPON REQUEST BY NOVA SCOTIA ENVIRONMENT

Municipal water utilities shall provide the following information upon request by Nova Scotia Environment:

- a) the name of each laboratory utilized, and the parameters analysed by that laboratory;
- b) verification that the UV system (if applicable) is capable of continually meeting the 40 mJ/cm² requirement;
- c) any monitoring results or reports required by the Approval;
- d) verification that chemicals used in the treatment process and all materials contacting the water meet both the AWWA quality criteria as set out in AWWA standards and the ANSI safety criteria as set out in ANSI standard NSF/60 (for chemical additives) or NSF/61 (for materials);
- e) standard operational procedures for the filtration and disinfection processes;
- f) laboratory certificate of analysis.

B) TO BE AVAILABLE FOR INSPECTION OR REVIEW UPON REQUEST

Municipal water utilities shall ensure the following information is available for inspection or review upon request by Nova Scotia Environment:

- a) operations manual;
- b) record drawings, incorporating any amendments made from time to time;
- c) process control testing and sampling results;
- d) source water protection testing and sampling results;
- e) calibration logs for instrumentation, such as flow measuring devices and continuous water quality analysers and indicators.





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