G.1 Immediate Reporting Requirements

The municipal water utility shall immediately notify NSE when the following occurs:

a) whenever the presence of total coliforms or *E.coli* 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) use of emergency water supply from an untreated or inadequately treated source;

e) a serious incident of raw water contamination;

f) when it is necessary to use a by-pass;

g) when it is necessary to use a back-up water supply;

h) any incidents of non-compliance with the Approval to Operate;

i) any other incident that may adversely affect the quality of water within the system (including line breakage);

j) if the chlorine residual in the water distribution system is less than stipulated;

k) if the GUDI status of a well changes (for groundwater only).

G.2 Annual Reporting Requirements

The municipal water utility shall comply with the following annual reporting requirements.

G.2.1 Annual Report - By April 1 of each year

The municipal water utility shall prepare and submit to NSE an annual performance report. The annual report shall contain, but not be limited to, the following information on the form provided by NSE:

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 exceedance 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 exceedance;

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 or IT; if operational conditions went outside the design ranges, CT or IT calculations shall 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 analysis conducted at the Facility or a non-certified laboratory;

m) a list of each certified operator and their level of certification.
G.2.2 Annual Sampling Plan - By October 1 of each year

The municipal water utility shall prepare and submit to NSE an annual sampling plan. 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:

• compliance monitoring, including QA/QC requirements;
• process monitoring;
• response monitoring;
• special process characterization and optimization monitoring (if applicable);
• source water characterization monitoring.

G.3 Ad Hoc Reporting Requirements

The municipal water utility shall notify NSE when the following occurs:

a) when any extensions to or modifications of the Facility are proposed which are not granted under the existing approval to operate - this includes process changes or waste disposal practices;

b) whenever the municipal water utility 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 lab 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 lab);

d) if modifications to the sludge disposal plan are proposed;

e) if a sampling location is proposed to be moved or re-located.
G.4 Information to be Provided Upon Request or For Inspection/Review

G.4.1 Upon request by Nova Scotia Environment

The municipal water utility shall provide the following information upon request by NSE:

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/cm\(^2\) 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 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.

G.4.2 To be available for inspection or review upon request

The municipal water utility shall ensure the following information is available for inspection or review upon request by NSE:

a) operations manual;

b) record drawings, incorporating any amendments made from time to time;

c) process control on-site 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.