

**COMMENTS FROM FRIENDS OF THE EARTH CANADA
May 20, 2010**

**Re: Proposed Wastewater Systems Effluent Regulations, *Canada Gazette*, Part I,
Vol. 144 No. 12 (March 20, 2010)**

Concerns with regard to enforceability are noted in the following nine areas. Others may be identified in subsequent analysis by Friends of the Earth.

I. Calculation of daily volume of effluent – s.5(1, (2) and (4)

s.5. (1) The owner or operator of a wastewater system must determine the annual average daily volume of effluent deposited via the final discharge point for a given year by

(a) for each day during that year when effluent was deposited via that point, determining the volume, expressed in m^3 , of effluent deposited during that day; and

(b) calculating the sum of those daily volumes of effluent deposited and dividing that sum by the number of days in that year.

s.5(2) The daily volume of effluent, expressed in m^3 , deposited for a given day must be determined by

(a) a continuous measure that yields the actual volume of effluent deposited during that day, if the annual average daily volume of effluent deposited during the previous calendar year — namely, the calendar year that ended before the beginning of the quarter or the month in which that day occurs — was more than $2\,500\,m^3$; and

(b) a continuous measure that yields the actual volume of effluent deposited during that day or an estimate of the daily volume of effluent deposited, in any other case.

s.5(4) If the annual average daily volume, expressed in m^3 , of effluent deposited via the final discharge point of a wastewater system for a previous calendar year cannot be determined under subsections (1) to (3), that annual average daily volume must be determined on the basis of the maximum rate of flow of effluent at the final discharge point based on the wastewater system's design specifications on the day on which it began or begins operations.

Concerns

1. Subsection 5(1) speaks of the determination of the annual daily volume of effluent for “a given year”. Subsection 5(4) speaks of that determination for a “calendar year” – that is, a 12 month period beginning on January 1 and ending on December 31. Since subsections 5(1) and (4) are both referring to the annual daily average volume, the period of time to which that average applies or over which that average is calculated is important. Precision and clarity are required. Is the period a “given year” (that is, any 12-month period) or is the period to which the calculation must be applied by the owner or operator to be a “calendar year”?¹

2. In subsection 5(2), the use of the word “actual” suggest that there may be another daily volume of deposited effluent that is not “real” or that is incorrect. Perhaps the word “actual” is used because subsection 5(2)(b) allows an estimate. However, the word “actual” is not needed to show the difference between what is measured and what is estimated. Also, the word “actual” is misleading.

II. Test methods – ss.9(b), 10(b), 11(2)(b) and (3)(b)

s.9. The carbonaceous biochemical oxygen demand due to the quantity of biochemical oxygen demanding matter in the effluent must be determined in accordance with one of the following methods:

(a) the method described in subsections 5210 A and 5210 B, with the inhibition of nitrification, of the Standard Methods; or

(b) any other equivalent test method that is authorized under the laws of the province where the wastewater system is located.²

Concerns

The wording of subsection 9(b) is certainly legally possible. Our concern is how the Ministers of Fisheries and Oceans and the Environment plan to operationalize the notion of “equivalency” in test methods. In the proposed WSER, there are no criteria listed in terms of precision, accuracy, method detection limits, standard deviation, etc for an “equivalent” provincial method. One solution to this gap would be for the Ministers to amend the proposed WSER to include these criteria. That would be transparent. Another solution would be for the Ministers to publish these criteria before finalization of the eventual WSER in Part 2 of the Canada Gazette.

¹ Note that ss.6, 7 and 8 speak of “calendar year”.

² Note: Only s.9(b) is being reproduced here. However, the wording is the same in ss.10(b) and 11(2)(b) and (3)(b).

The resolution of the issue of an absence of publicly known criteria for determining “equivalency” of provincially authorized test methods as per subsections 9(b), 10(b), and 11(2)(b) and (3)(b) is important: by allowing an “equivalent”, provincially authorized method, that method becomes part of the WSER and will determine compliance with the BOD matter requirements of the WSER under section 9 and compliance under subsections 10(b) and 11(2) and 11(3). It is necessary that a level playing field be maintained regarding regulation of this sector across Canada.

Once the criteria either appear in the eventual WSER or are published by the two Ministers, will the scientists of Fisheries and Oceans Canada and Environment Canada be evaluating test methods for BOD matter authorized under the laws of a province, in order to determine whether or not the provincial method is “equivalent” to the one required under subsections 9(a), 10(a) and 11(2)(a) and (3)(a)? Once Fisheries and Oceans Canada and Environment Canada scientists evaluate provincially authorized methods, will the Ministers of Fisheries and Oceans and Environment publish a list of which provincially authorized methods are “equivalent” under subsection 9(b)? If not, why not?

III. Environmental effects monitoring – s.14(5)

s.14(5) The determination referred to in subsection (2), and the environmental effects monitoring studies referred to in subsection (4), must be made and conducted and their results recorded, interpreted and reported in accordance with generally accepted standards of good scientific practice at the time that the studies are conducted.

Concerns

As mentioned above in the body of our comments, our concerns lie with the phrase “generally accepted standards of good scientific practice”. By whom are these standards to be accepted? What does “generally” mean? Does it mean by a preponderance of scientists in Canada who are involved in or have experience in this kind of monitoring? What is “good” scientific practice? What criteria determine “good” practice? How is the regulatee to establish that the standards of scientific practice that he or she used were “generally accepted” and “good”?

Also, since reporting of the findings of the environmental effects monitoring must also be done “in accordance with generally accepted standards of good scientific practice at the time that the studies are conducted”, this would allow individual regulatees to report their data in different ways. That would be unfortunate for the Ministers of Fisheries and Oceans and the Environment, since it may be difficult to compare and contrast data of environmental effects monitoring if each regulatee reports them in accordance with different methodology. As the experience in the Pulp and Paper Effluent Regulation shows, the results of environmental effects monitoring can allow the federal government to determine how successful the eventual WSER is in improving the quality of receiving

aquatic environment and the state of the organisms, including fish, that inhabit that aquatic environment. The results can be used by the federal government to adjust the regulatory requirements of the WSER if environmental effects monitoring shows that the WSER is not meeting the environmental objectives intended by the government. However, if reporting is not done in a consistent manner and in accordance with data verification, quality control and quality assurance, how usable and reliable will the results be?

IV. Identification report – s.16

Among the items that the identification report required under s.16 must contain is information in respect of the final discharge point, as follows:

s.16(1)(e) for the final discharge point,

- (i) its latitude and longitude, in degrees, minutes and seconds, and
- (ii) **an indication** of the geophysical characteristics, and any use that is made, of the water or place where effluent is deposited via the final discharge point and the name, if any, of that water or place;

Concerns

The problem arises with subsection 16(1)(e)(ii). How much information is an “indication”? How is the regulatee supposed to know the extent of the information required? How is an Environment Canada fishery officer or fishery inspector to enforce the requirement of subsection 16(1)(2)(ii) without a clearer, more precise description of what information is required? A possible solution would be to eliminate the phrase “an indication of” from s.16(1)(e)(ii).

Please see also s.16(1)(f) where the same problem is evident:

s.16(1)(f) the number of overflow points, for each of the combined sewers and sanitary sewers of the wastewater system, and for each of those overflow points,

- (i) its latitude and longitude, in degrees, minutes and seconds, and
- (ii) **an indication** of the geophysical characteristics, and any use that is made, of the water or place where effluent is deposited via the overflow point and the name, if any, of that water or place.

V. Acute lethality test by an owner or operator seeking a transitional authorization – s.21(3)

s.21(3) The owner or operator who applies for a transitional authorization must determine, or cause the determination of, by an accredited laboratory referred to in section 13, the acute lethality of the effluent deposited via the final discharge point in accordance with a method referred to in section 12 that is applied to two grab samples that were collected at the final discharge point on two days that were at least 21 days apart during the most recent four months before the application is made during which the wastewater system deposited effluent. However, if it is not possible to collect two grab samples at least 21 days apart, that method must be applied to one grab sample collected at the final discharge point.

Concerns

A wastewater system does not “deposit” effluent. According to subsection 36(3) of the *Fisheries Act* and section 4 of the proposed WSER, it is a person who deposits or permits the deposit. The wording of subsection 21(3) should be consistent with subsection 36(3) of the Act and with section 4 of the proposed WSER. Wording along the following lines should be considered:

“...to two grab samples that were collected at the final discharge point on two days that were at least 21 days apart during the most recent four months before the application is made during which **the owner or operator of the wastewater system deposited, or permitted the deposit of, effluent.**”

VI. Period within which an application for a transitional authorization must be made – s.21(4)

s.21(4) The application for a transitional authorization must be made in accordance with section 22 and within 18 months after the day on which these Regulations are registered.

Concerns

Given the wording of subsection 21(4), the owner or operator of a wastewater treatment facility can apply for a transitional authorization **one day before** the expiry of the 18 months after the day on which the WSER is registered. Unless Environment Canada officials and authorization officers are very efficient, it would likely take more than one day to review an application for a transitional authorization and all the documents that accompany it. In addition, Environment Canada officials may need to verify or ask an Environment Canada fishery officer or fishery inspector to verify the veracity and accuracy of the information submitted on the transitional authorization application. Thus, the owner or operator who applies at the last minute appears to be able to benefit from a period of non-compliance, during which the owner or operator has no TA and during which the TA application is being reviewed by EC.

VII. Application for a TA – required information – s.22

Among the items of information required, the owner or operator must submit a plan as described in s.22(f):

s.22 (f) a plan for modifications to the wastewater system, including a description of modifications to its processes, that are envisaged in order to meet the conditions for the authorization referred to in subsection 4(1) and a proposed schedule for implementation of the plan;

Concerns

The proposed regulatory text of subsection 22(f) requires only that the required plan contain modifications that are “envisaged”. The modifications are only required to be “envisaged”, and not implemented. Therefore, a transitional authorization holder may well be able to change their plan and remove some “envisaged” modifications and replace them with others that are likewise “envisaged”. The holder of a transitional authorization does not have to inform the authorization of such changes, although one would expect that, should there be changes in the “envisaged” modifications, this information would be contained in the progress report required from holders of transitional authorizations every five years after the date of issuance of the transitional authorization as required under subsection 25(3).

During the period of validity of a transitional authorization, new technology in wastewater treatment might appear on the market and be perhaps more efficient and/or more cost-effective to install and use. Perhaps it is for this reason that the word “envisaged” was chosen. Or, perhaps the word “envisaged” was chosen to leave flexibility or a loophole to regulatees who choose not to implement modifications that were “envisaged” as their vision of how to achieve compliance subsequently changes. It would be preferable for Environment Canada to build on the model of section 56 of Part 4 of the *Canadian Environmental Protection Act, 1999*, entitled “Pollution Prevention” and which empowers the Minister of Environment to require, via a notice, the preparation and implementation of a pollution prevention plans. Similarly, the proposed WSER must require that regulatees under the WSER **prepare, submit to the authorization officer and implement** their plan for modifications of their wastewater system.

VIII. Certification of the information submitted on the TA application

While we applaud that regulatees must provide certification for the information submitted on their transitional authorization application, we question the wording used in s.22(u):

s.22(u) a statement signed and dated by the owner or operator, or their duly authorized representative, that certifies that

(i) the information provided in the application was prepared by persons with the knowledge required to determine the truthfulness, accuracy and completeness of the information, and

(ii) to the best of their information and belief, based on representations made to them by those persons in response to queries concerning that determination, the information provided is true, accurate and complete.

Concerns

The wording of paragraph (u) allows regulatees to avoid responsibility for false or misleading information and for inaccuracies in their application. The *Fisheries Act* already contains a due diligence defence. However, the wording of subsection 22(u) of the proposed WSER goes beyond that defence and provides authority for regulatees to place the blame and guilt for false or misleading information and inaccuracies on others.

Paragraph 22(u) of the proposed WSER must be reworded to require that regulatees certify that the information submitted in or attached to the transitional authorization application is true, accurate and complete.

IX. Conditions of Issuance for TAs – s.23

Under the proposed WSER, the authorization officer is compelled to issue a transitional authorization if the application contains all required information **and** it was not technically or economically feasible before the time of the application for the regulatee to have modified the wastewater system, including its processes, in order to meet the conditions of deposit in subsection 4(1) of the proposed Regulations. Subsection 23(1)(b)(ii) states as follows:

s.23. (1) Subject to subsection (3), the authorization officer must issue a transitional authorization if

(a) the application contains the information required by section 22;

(b) the information referred to in paragraph 22(e) can reasonably be regarded as establishing that at the time of the application

(i) the conditions for the authorization referred to in subsection 4(1) are not met, and

(ii) it was not technically or economically feasible before the time of the application to have modified the wastewater system, including its processes, in order to meet those conditions; and

(c) the proposed schedule to implement the plans referred in paragraphs 22(f) and, if applicable, (t) can reasonably be regarded as feasible.

Concerns

The notion of “not technically and economically feasible” is for the regulatee alone to interpret. By what criteria is the regulatee to use to make the determination of “not technically and economically feasible”? Does the regulatee set these criteria him or herself? This wording leaves the door open for just about any municipality who could fall under the proposed WSER to qualify for a transitional authorization

Finally, subsection 23(1) requires that the schedule for implementing the required modification plans must “reasonably be regarded as feasible”. By whom must the schedule be so regarded? The regulatee? The authorization officer? What happens when there is disagreement between the regulatee and the authorization officer as to the “reasonable feasibility” of the schedule? Does the authorization officer merely refuse to issue the TA? Has Environment Canada developed criteria that will allow the authorization officer the means to determine whether or not the schedule can reasonably be regarded as feasible? Such criteria are necessary for the regulatee to be able to demonstrate the reasonableness of his or her schedule and for the authorization officer to determine if the schedule can be reasonable regarded as feasible for the transitional authorization to be complied with.