



Canadian Environmental
Law Association



May 19, 2010

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Director General
Public and Resources Sectors Directorate
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Dear Mr. Meades,

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

These are the comments of Ecojustice, the Canadian Environmental Law Association, Georgia Strait Alliance, the T. Buck Suzuki Environmental Foundation, Friends of the Earth, and Great Lakes United with regard to Environment Canada's proposed *Wastewater Systems Effluent Regulations* under the *Fisheries Act*, R.S.C. 1985, c. F-14 ("proposed Regulations" or "WSER"), which were published along with a Regulatory Impact Statement in the *Canada Gazette, Part I* on March 20, 2010 with a 60-day public comment period.

The organizations that have signed this letter are pleased that Environment Canada has now published its long-awaited proposed *Wastewater Systems Effluent Regulations* under the *Fisheries Act*. This letter will identify, briefly, the various organizations that are jointly commenting on the proposed WSER and then set out our joint comments on the provisions of the proposed regulatory text. We would be pleased to discuss further with you any of our comments about which you may have questions and for which you need clarification.

I. Background

A. Ecojustice

Ecojustice is Canada's premier non-profit organization providing free legal and scientific services to protect and restore the environment and human health. From offices at four locations in three Canadian provinces, Ecojustice legal counsel and staff scientists work on the leading environmental issues across the country, at every level of court. Since forming in 1990, we have engaged in legal reforms and litigation involving a range of water pollution sources, including municipal sewage treatment facilities.

Ecojustice (formerly Sierra Legal Defence Fund) published three National Sewage Report Cards¹ that examined municipal sewage treatment by major cities across Canada. In addition, Ecojustice has published three reports on municipal wastewater concerns, such as combined sewer overflows in the Great Lakes basin.² In 1999, we laid charges against the City of Victoria for discharging untreated sewage into the Juan de Fuca Strait.³ In 2006, we represented environmental organizations prosecuting the Greater Vancouver Regional District and the British Columbia Government for the discharge of deleterious sewage effluent into fish bearing waters at the city's Iona and Lions Gate sewage treatment facilities.⁴

B. The Canadian Environmental Law Association

The Canadian Environmental Law Association ("CELA") is a non-profit, public-interest group established in 1970 to use and improve laws to protect the environment and human health. Funded as a community legal clinic specializing in environmental law, CELA represents individuals and citizens' groups before trial and appellate courts and administrative tribunals on a wide variety of environmental protection and resource management matters, including water quality and quantity.

¹ Sierra Legal Defence Fund (now Ecojustice), "National Sewage Report Card I: Rating the Treatment Methods and Discharges of 20 Canadian Cities" (1994), "National Sewage Report Card (Number Two): Rating the Treatment Methods and Discharges of 21 Canadian Cities" (August 1999), "The National Sewage Report Card III: Grading the Sewage Treatment of 22 Canadian Cities", (September 2004), online: < www.ecojustice.ca>.

² Sierra Legal Defence Fund (now Ecojustice), "The Great Lakes Sewage Report Card" (November 2006) online: <http://www.ecojustice.ca/publications/reports/the-great-lakes-sewage-report-card>; Ecojustice, "Green Cities Great Lakes" (September 2008), online: <http://www.ecojustice.ca/publications/reports/the-green-infrastructure-report>; Ecojustice, "Flushing out the Truth: Sewage Dumping in Ontario" (June 2009), online: <http://www.ecojustice.ca/publications/flushing-out-the-truth-sewage-dumping-in-ontario> ["Ecojustice, "Flushing out the Truth""].

³ Sierra Legal Defence Fund. 1999 Annual Report at p 4.

⁴ Sierra Legal Defence Fund, Media Release: Greater Vancouver, BC, face trial over Lions Gate sewage pollution, accessed at: <http://www.ecojustice.ca/media-centre/press-releases/greater-vancouver-bc-face-trial-over-lions-gate-sewage-pollution/?searchterm=iona%20lions%20gate>. Sierra Legal Defence Fund, Media Release: Another charge laid against BC and Greater Vancouver, accessed at: <http://www.ecojustice.ca/media-centre/press-releases/another-charge-laid-against-bc-and-greater-vancouver/?searchterm=iona%20lions%20gate>.

C. Georgia Strait Alliance

Georgia Strait Alliance (“GSA”) is a non-profit environmental organization that works to protect and restore the marine environment, and promote the sustainability of Georgia Strait, its adjoining waters and communities. GSA is made up of over 50 member groups and thousands of individuals around the region, including conservation, recreation and community groups, marine and eco-tourism businesses, fishermen, labour unions and many others. Their vision is to live in a region with clean air, clean water, abundant salmon and rich biodiversity in addition to beautiful and liveable human communities and a strong, sustainable economy.

Since 1993, GSA has actively campaigned for advanced sewage treatment in the Georgia Strait region, in particular in the Capital Regional District (“CRD”) of Victoria and Metro Vancouver. Over the last four years, GSA has had a seat on the CRD’s Technical and Community Advisory Committee, advising the region on its plans for sewage treatment, as well as on the Core Advisory Group, advising the Canadian Council of Ministers of the Environment (“CCME”) and Environment Canada on its efforts to develop the national strategy on sewage treatment. They currently sit on the Regional District of Nanaimo’s Liquid Waste Advisory Committee and on Metro Vancouver’s Reference Panel, again advising on the region’s update Liquid Waste Management Plan.

D. T. Buck Suzuki Environmental Foundation

The T. Buck Suzuki Environmental Foundation (“TBSEF”) was established in 1981 to protect and improve fish life and fish habitat in BC including marshes, streams, rivers, lakes and marine waters. TBSEF has over 3,000 members from dozens of BC coastal communities, including many in the commercial fishing industry, and works at involving fishermen in making a positive contribution towards environmental sustainability. TBSEF has been involved in pollution prevention work since its inception, including active campaigns for advanced sewage treatment for Greater Victoria and Greater Vancouver.

Recently (2006/2007), GSA and TBSEF were clients on the private prosecution mentioned above against Metro Vancouver and the province of BC regarding alleged violations of the *Fisheries Act* at the Iona and Lions Gate plants, represented by Ecojustice Canada.

E. Friends of the Earth

Friends of the Earth (“FOE”) is a national voice for the environment with its mission to restore communities and the earth. FOE is the Canadian member of the 76-country Friends of the Earth International. Since its founding in 1978, FOE has advocated for a soft path for management of natural resources, initially for energy resources and, in the last 10 years, for fresh water. FOE has led research in the application of water soft paths for provincial and municipal levels and provides training and capacity building to entities

embracing the water soft path. FOE has campaigned extensively for enforcement of pollution laws, including effluent regulations and their requirement of environmental effects monitoring.

F. Great Lakes United

For over 27 years, Great Lakes United has been a unifying voice for ensuring a healthy and vibrant future for the Great Lakes and St. Lawrence River ecosystem. We are a diverse coalition of organizations and individuals. We are citizens, environmentalists, conservationists, labour unions, First Nations, tribes, hunters, anglers, academics, and progressive business.

Together, we work to clean up toxic pollution, stop invasive species, and protect the waters of the Great Lakes and St. Lawrence River from damage and irresponsible use. Thousands of voices are calling for a healthier Great Lakes and St. Lawrence River and Great Lakes United continues to be the coalition through which these voices are heard.

II. Executive Summary

A. The Hazards of Undertreated Wastewater Effluent in Canada

Municipal wastewater treatment plants are the top 14 water polluters, by mass, discharging into Canadian water bodies according to 2006 data.⁵ Over 85% of the pollution discharges to water reported in 2008 were from the sector predominately made up of municipal wastewater.⁶ Wastewater effluent is an environmental and health concern not only because of the amount discharged, but also because of its composition.

One contaminant typically contained in wastewater effluent is biochemical oxygen demanding (“BOD”) matter, which is a significant pollutant. In fact, wastewater effluent is one of the main sources of BOD matter in the aquatic environment.⁷ The decomposition of BOD matter depletes dissolved oxygen in the aquatic environment.

Other contaminants typically found in wastewater effluent include metals, nutrients, fecal coliform, and total suspended solids.⁸ Of increasing concern is the presence of newly emerging contaminants in wastewater effluent, such as pharmaceuticals, brominated

⁵ Based on a ranking of facilities releasing to surface water. Pollutionwatch analysis uses National Pollutant Release Inventory data from Environment Canada. Ranking conducted on May 5, 2010, online:<Pollutionwatch.org>.

⁶ Environment Canada. National Pollutant Release Inventory (NPRI) 2008 Facility Data Summary, online:<<http://www.ec.gc.ca/inrp-npri/default.asp?lang=en&n=F3B474E9-1>>.

⁷ The greater the biological oxygen demand (“BOD”) of the sewage the more oxygen needed to decompose the organic matter in the sewage in the natural environment. Excessive BOD can result in low dissolved oxygen concentrations in receiving waters, thus threatening aquatic life.

⁸ Canadian Council of Ministers of the Environment, “Municipal Wastewater Effluent in Canada” (December 2006), online: <http://www.ccme.ca/assets/pdf/mwwe_general_backgrounder_e.pdf> at 1 [CCME, “Municipal Wastewater”].

flame retardants, personal care products, pesticides, and endocrine disrupting compounds.⁹

The negative environmental and health impacts of wastewater effluent are significant and wide-ranging. As recognized by the Government in the Wastewater Systems Effluent Regulations Regulatory Impact Analysis Statement ("RIAS"):

Ecosystem impacts can include fish kills; algal blooms; the destruction of habitat from sedimentation, debris, and increased water flow; and short- and long-term toxicity from chemical contaminants; along with the accumulation and magnification of chemicals at higher levels of the food chain. Human health risks can also stem from the release of untreated or inadequately treated wastewater effluent. In some circumstances, it could contaminate drinking water sources with bacteria, protozoans, and several other toxic substances. Canadians may also be put at risk from consuming contaminated fish and shellfish and engaging in recreational activities in contaminated waters. In terms of fisheries resources, wastewater effluent can, for instance, limit the full potential of the Canadian shellfish industry, an industry with sales of \$1.5 billion per year, by contributing to the closure of harvesting areas. It can also impact tourism by contributing to lost recreational opportunities resulting from beach closures and restrictions on other beneficial water uses.¹⁰

Other forms of adverse effects that can be caused by the introduction of wastewater effluent into the environment include changes in species diversity, composition, and abundance within a given ecosystem; taste and odour problems in drinking water; reduced aesthetic value of beaches and waterways; and flooding, habitat loss, and washout.¹¹

B. Summary of Comments on Proposed Regulations

We are pleased that the federal government is taking action to introduce national standards for the treatment of wastewater effluent in Canada, and for wastewater monitoring and reporting. However, as outlined below, we have serious concerns with regard to a number of the proposed Regulations' shortcomings. Overall, we are concerned that, as drafted, the WSER would permit a large number of wastewater treatment facilities across Canada to remain in noncompliance with national treatment standards for up to 30 years, and that there are no enforceable targets set for reductions of combined sewer overflows ("CSOs"). Therefore, the effect of the WSER would be to sanction the deposit of vast quantities of deleterious substances over an extended period of time into Canadian waters frequented by fish, contrary to the purposes and objects of

⁹ CCME, "Municipal Wastewater", *Ibid* at pp1-2.

¹⁰ Wastewater Systems Effluent Regulations Regulatory Impact Analysis Statement, C. Gaz. 2010. I. 480 at 484 ["Wastewater Regulations RIAS"].

¹¹ See, e.g. CCME, "Municipal Wastewater", *supra* note 8 at 2.

the Fish Habitat Protection and Pollution Prevention provisions of the *Fisheries Act*, as well as the spirit and intent of Canada's international obligations under the Great Lakes Water Quality Agreement.

Given the serious risks posed by undertreated wastewater effluent in this country, as well as the fact that Canada lags significantly behind other OECD countries in making the move toward minimum standards of secondary treatment, it is our view that the timeframe set out for facilities to comply with the proposed WSER standards are excessively lenient. Permitting wastewater treatment facilities to apply for transitional authorizations that would allow them to delay complying with the WSER standards until as late as December 31, 2039 poses unacceptable risk to the environment and human health in Canada.

In addition to setting a shorter period for compliance with national treatment standards, we also submit that the government must strengthen the criteria for treatment facilities to qualify for transitional authorizations. This will ensure that it is only those facilities that truly cannot afford to upgrade in order to meet the WSER standards that are granted transitional authorizations. The provincial and federal governments must also ensure that they respectively contribute their fair share of funding so that these necessary upgrades can take place.

We are also concerned that the draft regulatory text would actually extend the timeline for compliance with the WSER standards for facilities that have a CSO discharge location that poses risks that are equal to or greater than those of the main effluent discharge. Facilities with CSO discharge locations that pose high risks are precisely those which should be made to upgrade in a timely manner so as to comply with national standards and prevent the continued risks posed to the environment and human health from their CSO discharges. Allowing the filing of a CSO plan to delay, until December 31, 2039, important upgrades to improve final effluent discharges that do not meet the WSER standards is unacceptable.

Furthermore, significant reductions in CSOs and an ultimate elimination of such events should be a fundamental goal of the WSER. This goal should be accomplished through the creation of enforceable, aggressive, targets set out under the Regulations.

In our view, the points-based system set out in the proposed WSER for the risk assessment that determines which timeline a treatment facility will be bound by for compliance with regulated treatment standards suffers from three main problems. First, it is the Government of Canada, not the owner or operator of a treatment facility, that should have responsibility for determining the number of points to be allocated to the system for the purposes of the risk assessment. Alternatively, these assessments should be audited by the government so as to ensure accuracy and avoid any potential for bias arising from the interest of owners and operators of treatment facilities in securing as long a timeline as possible for compliance with the WSER.

Our second area of concern with regard to the points-based system set out in the draft Regulations is that, in certain circumstances, it may not be adequately reflective of the nature of the receiving environment at issue, in that it does not adequately reflect, *inter alia*, whether there are endangered species or endangered species habitat near or at the discharge point that may be negatively impacted by the effluent discharge, the presence of degraded or contaminated water or sediment quality, or pre-existing excessive nutrient loading causing eutrophication. Thirdly, we feel that the threshold for categorizing the largest of treatment systems is excessively weak, and that this could allow major Canadian cities to continue polluting for decades.

The standards set out for wastewater effluent in the proposed Regulations effectively represent a national minimum standard of secondary treatment for wastewater effluent in Canada. While this is a significant improvement from the status quo in many areas where sewage is treated at only a primary level or where it receives no treatment at all, it is important to recognize that treatment standards must be reflective of the particular receiving environment involved, as in some contexts secondary treatment may not be adequate to protect the environment and human health. Thus, more stringent standards for deposits of wastewater effluent into Canadian waters should be set as necessary (e.g. where there are pre-existing eutrophication concerns).

Another area of concern with regard to the quality of effluent discharged from treatment facilities is that the proposed text of the WSER would allow facilities to receive temporary authorization for the deposit of un-ionized ammonia at a concentration that renders the effluent acutely lethal, provided that it is acutely lethal due only to the presence of ammonia. Furthermore, the proposed text of the WSER would permit such deposits of acutely lethal effluent to be renewed at three year intervals without setting a limit on the number of "temporary" authorizations that can be issued to a given facility. It is important that the final WSER be worded in a manner that does not weaken the general prohibition against the deposit of deleterious substances set out in subsection 36(3) of the *Fisheries Act* by authorizing the deposit of acutely lethal wastewater effluent.

We are pleased that the draft WSER set out requirements for environmental effects monitoring as a condition for authorization to deposit effluent. However, we believe that further detail is needed regarding the nature of environmental effects monitoring to be required, in order to ensure that a precautionary and effective approach is taken to long-term monitoring. It is also important that the final text of the WSER include requirements for public reporting of the results of this monitoring, as well as CSO events. Such public disclosure will allow Canadians to make informed choices regarding exposure to sewage contaminated waters, stay informed of the problem, and hold their local municipalities accountable.

Finally, given the national importance of the issue of adequate wastewater effluent treatment, it is important that the WSER contain requirements for regular review of the Regulations' text, so as to ensure new scientific knowledge and wastewater treatment technology are taken into account. It is also important that Environment Canada take

steps necessary to ensure ongoing strict enforcement of the WSER, and that a zero tolerance approach be taken toward violations of the standards set out.

III. Transitional Authorizations

A. Proposed Timelines are Excessively Long

We have significant concerns regarding the excessively lenient timeframe set out for facilities to comply with the proposed WSER standards. Although the national effluent quality standards will come into force 24 months after the WSER are registered (with the exception of total residual chlorine, which will be phased in over three years),¹² wastewater treatment facilities would be eligible to apply for a transitional authorization which would mean that high risk wastewater systems would be required to meet the effluent quality standards by the end of 2019, medium risk systems by the end of 2029, and low risk systems by the end of 2039. As highlighted by a number of observers, in light of the severe environmental and health risks posed by untreated and/or inadequately wastewater effluent in Canada, these timelines are far too long.¹³

It is our understanding that the reason for the long timeframe is the ‘significant’ cost, estimated at 5.9 billion dollars nationally, to upgrading facilities to meet the WSER standards. However, it is important to point out that the economic benefit of these upgrades is estimated at 17.6 billion dollars.¹⁴ Given the economic benefit of investing in wastewater system upgrades that is cited in the RIAS outweighs the cost by 3 to 1, we question the timeline of transitional authorizations and request that they be shortened.

The length of the proposed timelines is particularly concerning, given that a national strategy to achieve a minimum of secondary treatment for wastewater effluent is long-overdue in Canada. Ecojustice first highlighted the lack of national sewage treatment standards over 14 years ago in our first ‘National Sewage Report Card’.¹⁵ By contrast, the 1992 *Pulp and Paper Effluent Regulation*, S.O.R. 92/269 (“PPER”) under the *Fisheries Act* allowed for a 13-month transitional authorization which could be extended by up to two additional years under ‘extraordinary circumstances’.¹⁶ Like the proposed

¹² Draft WSER at ss. 44(2)-(3).

¹³ See, e.g. Environment Canada. National Report. Wastewater Consultations. November 2007 to January 2008; Environment Canada Proposed Regulatory Framework for Wastewater, Consultation Document, October 2007; and CCME Canada-wide Strategy for the Management of Municipal Wastewater Effluent, draft September 2007. Summary of Input. July 2008, online: <http://www.ec.gc.ca/eu-ww/default.asp?lang=En&n=4B94EB4A-1> ["CCME Strategy"].

¹⁴ Wastewater Regulations RIAS, *supra* note 10.

¹⁵ Sierra Legal Defence Fund (now Ecojustice), “National Sewage Report Card I: Rating the Treatment Methods and Discharges of 20 Canadian Cities” (1994).

¹⁶ See, e.g. Environment Canada, “Compliance and Enforcement Report, Vol. I: Six Regulations under CEPA and the *Fisheries Act*”. Accessed at: <http://www.ec.gc.ca/alef-ewe/default.asp?lang=En%26n=09ECE703%26offset=2%26toc=show%23chap2>; Commission for Environmental Cooperation, Factual Record Pulp and Paper Submission (SEM 02-003) (June 2006) at p. 52, online: http://www.cec.org/Storage/72/6649_SEM-02-003-FR_en.pdf.

WSER, the PPER required some mills to upgrade treatment for pulp mill wastewater to meet the final effluent standard.

The pulp and paper sector numbered 154 mills when the PPER was brought into force in 1992; the cost of compliance was financially significant spread among a regulated community of 154 which has since been reduced in number due to various closures. In contrast, the operators of publicly owned wastewater systems are greater in number and have a greater base from which to draw the required financing to achieve compliance. Metal mines, under the 2002 *Metal Mining Effluent Regulations*, S.O.R. 2002/222 ("MMER") had a maximum period of 30 months for a general transitional authorization covering all regulated parameters, and a further possible authorization for 30 months to cover only total suspended solids. This was a total of 60 months or five years to come into compliance. Again, the regulated sector that had to absorb the costs of compliance was smaller than the municipal sector, and the impact of its polluting effluents on the environment, while serious, was not of the degree that the RIAS of the proposed WSER demonstrates for the sector of publicly owned or operated wastewater facilities when viewed at a national scale.

We see no justification for giving such a lengthy period to achieve compliance to a sector that is predominately made up of municipal wastewater facilities and that, based on published data from Environment Canada's National Pollutant Release Inventory, was responsible for 85% of the pollution discharges to water reported in 2008. Moreover, dischargers of wastewater effluent that would fall under the proposed WSER would be installing "off-the-shelf", already existing technology. The proposed WSER would not be "technology-forcing" – that is, requiring the invention of technology that does not currently exist. Hence, the lengthy periods for transitional authorizations allowing up to 30 years before compliance with the proposed WSER standards must be achieved do not appear to be necessary. The time period should be shortened, in order to correct what Environment Canada acknowledges is a severe water pollution problem.

Secondary treatment was established as a national standard in the United States over 30 years ago, and advanced technology, which includes means to recover resources from sewage, is being adopted in many European cities as part of integrated waste management and energy conservation strategies. The approximately 10 to 30 year implementation timeline established by the transitional authorizations set out in the proposed Regulations is thus unacceptable when one stacks up the legal requirements imposed on this sector by other nations who, like Canada, are members of the Organization for Economic Co-operation and Development ("OECD"). Simply put, it should not take Canadian cities up to 30 years to achieve the standard in force in other OECD nations for over 20 years.

In our view, a more acceptable timeline for the application of transitional authorizations would be a maximum of five years (or 2015) for high risk facilities, ten years (or 2020) for medium risk facilities, and 15 to 20 years for those facilities which pose a low risk to the environment and human health. We suggest that an absolute maximum of 20 years be allowed and we would prefer an even shorter time frame, given the ongoing

environmental and health impacts of wastewater effluent releases, and given that Canada is decades behind comparable jurisdictions in this area. These timelines are achievable. For example, in regions like Metro Vancouver, preliminary planning and design work on both primary plants is already underway.

The criteria for qualification for transitional authorizations should also be strengthened, such that any municipality applying for one must demonstrate the necessity of such an authorization based on strict and transparent financial criteria, rather than just the level of risk as assessed by the facility operator themselves as currently proposed in section 22 of the draft WSER. In other words, if a municipality can afford to upgrade to meet the WSER under a shorter timeframe, it should have to and not use the transitional authorization as a means of delaying action. In this vein, it is also important that the provincial and federal governments contribute their fair share of funding so that the upgrades necessary for compliance with WSER standards can be made.

Recommendations

1- The proposed timelines for transitional authorizations should be shortened to five years (or 2015) for high risk facilities, ten years (or 2020) for medium risk facilities, and 15-20 years for low risk facilities. This would still allow the estimated 5.9 billion dollars in infrastructure costs to be distributed over several decades, and would allow municipalities to plan their tax rates, secure whatever federal and/or provincial/territorial funding is available, and maintain other municipal services while progressing towards compliance with the WSER standards. It would also allow the 17.6 billion dollars in benefits to be realized sooner.

2- Municipalities must demonstrate the need for a transitional authorization based on strict and transparent financial criteria rather than just based on the level of risk points. In other words, if a municipality can afford to upgrade to meet the WSER under a shorter timeframe, it should be required to, and should not be permitted to use a transitional authorization as a means of delaying action.

B. Extended Timeframe for Medium and High Risk Discharge with Combined Sewage Overflow (“CSO”)

According to the draft text of subsection 23(2) of the WSER, if Schedule 4 CSO risk points are less than the total Schedule 3 risk points, then the CSO risk points have no bearing in the determination of the duration of the timeline for meeting the wastewater effluent standards set out in the proposed WSER.

However, CSO risk points become relevant if they are equal to or higher than the Schedule 3 risk points (and the Schedule 3 points are 50 or more), such that if the risks of one CSO discharge location are equal to or greater than the risk level of the main effluent discharge, then the timeline to meet the WSER standards is actually *extended*. Thus, final effluent discharges which would otherwise have a maximum transitional

authorization issuance to 2019 (high risk) or 2029 (medium risk), in the absence of consideration of a CSO, qualify for a transitional authorization until 2039 under subsection 23(2)(c)(ii) of the proposed WSER, if they submitted a CSO plan under subsection 22(t) .

In addition, it is important to note that the plan under the draft text of subsection 22(t) need only be submitted on one CSO overflow point even though many cities have numerous CSO overflow points.¹⁷

In essence, the effect of subsection 23(2)(c)(ii) would be to allow a medium or high risk final effluent discharge to jump to the time frame allotted to a low risk discharge, allowing up to three decades of undertreated sewage to be discharged before an upgrade is required so as to comply with the WSER.

The proposed Regulations should not allow the filing of a CSO plan to delay, until December 31, 2039, important upgrades to improve final effluent discharges that do not meet the WSER standards, and are thus deleterious to fish in addition to causing other negative environmental and health impacts. In fact, facilities with CSO discharge locations that pose high risks are precisely those which should be made to upgrade in a timely manner so as to comply with national standards and prevent the continued risks posed to the environment and human health from their CSO discharges.

Recommendations

3-We recommend that CSO risk points, and the filing of a CSO plan, should not be used to allow a final effluent of high or medium risk to jump to the low risk transitional authorization timeframe, such that compliance with the WSER is delayed until December 31, 2029. The loophole in subsection 23 (2)(c)(ii) should be removed.

C. Inadequacies of the Points-Based System

As set out in the proposed Regulations, the risk assessment that determines which timeline a treatment facility will be bound by is based on a points system that evaluates the characteristics of the system's effluent, the receiving environment and, where applicable, characteristics of CSO locations. We have three main concerns with regard to the points-based system as set out in the proposed Regulations.

1. Potential Bias of Facility Owners and Operators

¹⁷For example, Winnipeg reports to have 79 CSO overflow points and Toronto reports 71 CSO locations. These are not extraordinary numbers, but typical of many cities with combined sewer systems. See: Public Registry - City of Winnipeg's Wastewater Collection and Treatment Systems Review. Combined Sewer Overflow Management Study, online: <http://www.gov.mb.ca/conservation/eal/registries/4864wpgww/index.html>; Toronto Wet Weather Flow Master Plan. "What is a CSO", online: http://www.toronto.ca/involved/projects/archived/wwfmmp_archive/faq.htm#CSO.

First of all, in making an application for a transitional authorization, it is the owner or operator of the wastewater treatment facility at issue that is responsible for determining the number of points to be allocated to the system for the purposes of the risk assessment. Given that owners and operators will often have an interest in securing as long a timeline as possible for compliance with the WSER, and that the assessment of several of the criteria used to assign points, such as the nature of the receiving environment, includes a level of subjectivity, it is inappropriate for the operator to do their own risk assessment to determine their deadline for upgrading to secondary treatment. An example of an operator's risk assessment that has been called into question by observers, including Ecojustice, is Metro Vancouver. Though Metro Vancouver acknowledged recently¹⁸ that the proposed Regulations do not offer complete clarity on whether the Iona plant discharges into an 'open marine' system or an 'estuary', the regulations leave open the interpretation that the Iona treatment facility is a medium risk system, a conclusion that Ecojustice and others have not supported.

It is important to verify the assessment prepared by the owners and operators, and Environment Canada's fishery officers/fishery inspectors have the power under the *Fisheries Act* to enter and inspect any wastewater treatment facility. The fishery officers and fishery inspectors have the power to verify the accuracy of the assessment and any other information in or related to the application for a transitional authorization.

2. Inadequate Reflection of Receiving Environment Characteristics

Another concern regarding the points-based system is that, in certain circumstances, it may not be adequately reflective of the nature of the receiving environment at issue. For instance, the system does not adequately reflect whether there are endangered species or endangered species habitat near or at the discharge point that may be negatively impacted by the effluent discharge, the presence of degraded or contaminated water or sediment quality, or pre-existing excessive nutrient loading causing eutrophication. This is of particular concern for endangered species such as the southern resident killer whale, which is considered one of the most contaminated marine mammals due to toxic chemicals in the marine environment that were likely to have sewage effluent as their primary source. The lack of risk point allocation taking these receiving environment concerns into consideration means that significant adverse environmental effects may occur in water frequented by fish, contrary to the *Fisheries Act*'s goals of fish habitat protection and pollution prevention. Importantly, allowing receiving environments to be exposed to inadequately assessed risks in the face of the potentially significant adverse environmental and health effects caused by wastewater effluent is also contrary to the precautionary principle of international law.

As noted by GSA in their January 2008 submission to the CCME strategy's consultation process:

¹⁸ Metro Vancouver Finance Committee meeting, April 15, 2010.

This lack of definition of marine ecosystems shows a clear ignorance of the variety of environments that exist along Canada's coasts, in particular in British Columbia.

The Strait of Georgia is an inland sea; it is not "open marine". Located between Vancouver Island and the mainland coast of British Columbia, the Strait is part of a huge estuary system – a place where hundreds of rivers flow into the sea, helping to shape the unique characteristics of the region and making the Strait of Georgia biologically rich. According to Parks Canada, the southern Strait of Georgia is Canada's "most at-risk natural environment". This unique environment cannot be confused with the open ocean.

In addition to lack of recognition that the marine environment is ecologically complex, the definition of "open ocean" underscores the belief that our oceans are a place to dump our problems; in this case, the toxins that are part of our sewage. Like other water bodies, our oceans are under threat from many sources, including rising temperatures linked to climate change and the growing negative impact of solid waste dumping. The latter is a warning. For decades we have allowed solid waste to make its way into the marine environment and we are now seeing the adverse effects of these activities, with plastics being mistaken for food by animals, and garbage breaking down and further polluting our waters.

As we are now able to detect measurable amounts of toxins in our lakes and streams, we risk one day being able to do this in our oceans to the same degree.

Another significant concern with regard to the potential for the risk categories to inadequately reflect the nature of the receiving environment is the completely arbitrary definition of "open marine" that was added to the regulation but was not part of the CCME strategy. There is no scientific reason for the definition of "an arc of 135° extending 20 km" as being open marine. Put into the Georgia Strait context, one could conclude that this definition was created specifically to allow Metro Vancouver's Iona Wastewater Treatment Plant to fall into this category (the Iona outfall is 22 km from land). It is more scientifically rigorous for the Iona plant's discharge zone to be defined as a marine estuary, as noted by the Liquid Waste Management Plan's Reference Panel,¹⁹ which would assign it more risk points and mandate an upgrade to secondary treatment before 2020.

Finally, the points system needs to include consideration of whether or not the receiving aquatic environment is part of or adjacent to a national marine park under the *Canada National Parks Act*, S.C. 2000, c. 32 or a marine protected area under the *Oceans Act*, S.C. 1996, c. 31. A national marine park or a marine protected area may include fish, as that term is defined in section 2 of the *Fisheries Act*; a national marine park or marine protected area may have been created under their enabling legislation, in order to protect the aquatic life, including fish, that is found there. While neither the *Canada National*

¹⁹ Metro Vancouver Liquid Waste Management Plan's Reference Panel – Memo to Finance Committee, April 2010. Available online at: <http://www.waterbucket.ca/wcp/sites/wbcwcp/documents/media/114.pdf>.

Parks Act, nor the *Oceans Act* may come into play in 2010, the proposed WSER must make provision for that future possibility. The 2007 Cabinet Directive on Streamlining Regulations sets out that federal regulations must be forward-looking. Therefore, the points system should be expanded to include those as criteria and to include “points” for them.

3. Inappropriate Categorization of System Size

Our final concern regarding the points-based system is with respect to the categorization of system size. The current table indicates that the largest sewage treatment systems are those with discharges of > 50,000 m³/day. This is a low threshold for ‘very large’; one of Metro Vancouver’s sewage treatment plants (Iona) discharges 11 times this amount,²⁰ and Toronto’s largest sewage treatment plant (Ashbridges Bay) has a capacity that is approximately 16 times this amount.²¹ Leaving the WSER as currently drafted would mean that medium sized communities could be assessed the same risk points as the largest cities in the country. The essence of this table is to identify the sources of risk of a sewage treatment plant (to the environment and human health) and this weak threshold could allow some municipalities to continue polluting.

Recommendations

4- We recommend that the points system for determination of the transitional authorization period be determined by the government, or audited by the government if determined by the operator, to ensure accuracy.

5- Environment Canada fishery officers and/or fishery inspectors should inspect wastewater treatment facilities and their related equipment, such as final discharge points, sewer outfalls and combined sewer overflows, etc., in order to verify that information set out by owners and operators of those facilities in applications for transitional authorizations is accurate and complete.

6- We recommend that the points system be expanded to recognize additional risks that final effluent discharges pose to the receiving environment and to fish and fish habitat, so as to conform with the precautionary principle, the goals of fish habitat protection and pollution prevention, and protection of critical habitat for species at risk. For example, the risk points should incorporate considerations for negative impacts on endangered species and their habitat, as well as eutrophication of waters, and should ensure more timely restoration of degraded water and/or sediment quality.

7- We further recommend that the points system of the proposed WSER be expanded to include national marine parks under the *Canada National Parks Act* and marine protected areas under the *Oceans Act*.

²⁰ Metro Vancouver website. Accessed at: www.metrovancouver.org.

²¹ City of Toronto. Accessed at:

http://www.toronto.ca/water/wastewater_treatment/treatment_plants/ashbridges/about.htm

8- We recommend the creation of an additional category of system size in order to better assess impacts of the largest sewage treatment systems.

IV. Enforceable Reduction Targets are Needed for Combined Sewer Overflows

Another area of significant concern with regard to the proposed Regulations is the fact that the effluent discharge standards set out do not apply to unplanned discharges, including sanitary sewer overflows ("SSOs") and CSOs, and that the proposed WSER do not set targets for the reduction and ultimate elimination of such discharges.

Recent research on municipalities in Ontario revealed that in this one province alone, there were over 1500 untreated or undertreated sewage discharges in 2006 due to bypasses and CSOs, adding up to billions of litres of sewage deposited to waters frequented by fish.²² Additionally, in some areas of the province, including the Great Lakes region, climate change is aggravating this issue due to the increase in occurrence of heavy downpours and storms which overwhelm combined sewer systems.

As discussed above, subsection 23 (2)(c)(ii) of the draft WSER allows an owner or operator of a municipal wastewater plant to opt to work on a CSO while delaying final effluent discharge improvements. All that is required, according to subsection 22(t), is the filing of a plan for elimination of the CSO. The regulation does not contain enforceable outcomes to ensure elimination of the CSO or reduction targets for overflows.

Given the severity of the problem of CSOs, and that the risks posed to human health and the environment from wastewater facilities with combined sewers can be even "greater than those posed by the continuous release of the main effluent",²³ significant reductions in CSOs and an ultimate elimination of such events should be a fundamental goal of the WSER. This goal should be accomplished through the creation of enforceable, aggressive, targets under the Regulations.

It is worth noting once again that facilities with CSO discharges in excess of Schedule 3 risk points are precisely those that are most in need of timely action to eliminate the CSO. That is, CSOs should be addressed quickly, in addition to measures to address the serious risks posed by main effluent discharges. Wastewater systems that pose high or medium risks from their final effluent, as well as higher risks from their CSOs, should not benefit from more lenient timelines for WSER compliance than wastewater systems that pose high or medium risks from their final effluent. It is concerning that the proposed Regulations would permit timelines to be extended to give time to address CSO discharges, without any corresponding requirement for facilities to actually reduce or eliminate their CSOs.

In addition, the Regulations are silent on facilities with a final discharge effluent discharge that meets the Regulations but has CSO overflows in the collection system.

²² Ecojustice, "Flushing Out the Truth", *supra* note 22 at p7.

²³ CCME Strategy, *supra* note 13 at p5.

Though response plan and notification requirements apply in the case of CSOs and SSOs, these procedural requirements will not have the same results as binding discharge limits or enforceable targets, and are unlikely to have any significant effect on sewage dumping through CSOs, SSOs and bypasses. This is particularly concerning, given the severity of the problems associated with unplanned discharges such as CSOs, as well as the sheer number of cities in Canada with combined sewers. For instance, cities such as Winnipeg, Montreal, Hamilton and Saint John all have at least 20 percent combined sewers, while at least 10 percent of sewers in cities such as Vancouver, Edmonton and Québec City are combined with storm water.²⁴

The effect of the proposed Regulations would be that if a facility's timeline for compliance with the WSER standards were to be extended under subsection 23(2)(c)(ii) because of the high risks posed by its CSOs, there would be no legal mechanism requiring the operator to ensure reductions in CSOs. We recommend the WSER require a 50% reduction of CSOs in five years, and elimination of CSOs and SSOs within ten years.

Recommendations

9- The Regulations should include enforceable reduction targets for CSOs. We recommend an interim target of 50% reduction in five years and requirements for the eventual elimination of all unplanned discharges, including SSOs and CSOs, within ten years.

V. Inadequate Standards

As recognized in the March 20, 2010 *Wastewater Systems Effluent Regulations* RIAS, management of wastewater effluent in Canada is currently characterized by "inconsistent regulatory regimes and varying levels of treatment across the country." This patchwork system of wastewater regulation has frequently failed to protect environmental integrity and human health. We are therefore supportive of the government's move to creating national standards for the quality of wastewater effluent discharged from treatment facilities, and for wastewater monitoring and reporting.

We recognize that the standards set out for wastewater effluent in the proposed Regulations effectively represent a national minimum standard of secondary treatment for wastewater effluent in Canada, and that this is a significant improvement from the status quo in many areas where sewage is treated at only a primary level or, in the case of places such as Victoria, British Columbia and many municipalities in Newfoundland and Labrador, where it receives no treatment at all. However, it is important to recognize that treatment standards must be reflective of the particular receiving environment involved, as in some contexts secondary treatment may not be adequate to protect the environment

²⁴ Sierra Legal Defence Fund (now Ecojustice), "The national sewage report card (Number three): Grading the Sewage Treatment of 22 Canadian cities" (September, 2004) at 6. Online: <http://www.ecojustice.ca/publications/reports/national-sewage-report-card-iii> .

and human health. For instance, in water bodies such as Lake Simcoe in Ontario, which have strict phosphorus loading limitations due to eutrophication concerns, secondary treatment is inadequate and advanced treatment with phosphorus removal is necessary to protect the receiving water.

Recommendations

10- The Regulations must recognize that the standard as set out may not sufficiently protect all receiving waters and must contain more stringent standards for deposits of wastewater effluent into Canadian waters as necessary (e.g. where there are pre-existing eutrophication concerns).

VI. Reporting and Monitoring

A. Importance of Public Reporting

In its 2007 Consultation Document on a proposed regulatory framework for wastewater, Environment Canada committed to making CSO reporting under the WSER publicly available.²⁵ This is particularly important in light of the severity of the problem and the dearth of CSO reporting that currently exists in many provinces, including Ontario.²⁶

That the commitment to public CSO reporting is not included in the proposed Regulatory text released for public comment is a serious shortcoming which must be addressed in order for Canadians to make informed choices regarding exposure to sewage contaminated waters, and so that they are informed of the problem and can hold their local municipalities accountable.

In addition to further detail regarding environmental monitoring requirements (as discussed below), the WSER must also contain an explicit requirement for records and reported results of such monitoring to be made publicly available. As drafted, section 17 merely requires operators to report results to a federal authorization officer. This despite the fact that the federal government has committed on a number of occasions to making these reports publicly available in the form of annual reports, and to developing a national database to house such regulatory reporting information (including information on CSOs).²⁷ In order to provide Canadians with adequate access to information, this requirement must be embodied in the finalized text of the WSER.

For example, the province of Ontario publishes annual on line compliance reports on regulated facilities. These reports provide facility specific compliance information to the public, including detailed information such as the pollutant and standard in violation, the concentration of the pollutant in exceedence, the date of the violation or period, and the

²⁵ Environment Canada, "Proposed Regulatory Framework for Wastewater: Consultation Document" (2007) at p10.

²⁶ Ecojustice, "Flushing out the Truth", *supra* note 2 at p6.

²⁷ CCME Strategy, *supra* note 13 at 5; Wastewater Regulations RIAS, *supra* note 10 at 483 and 510.

action taken to correct the situation.²⁸ Similar annual compliance reports are published and available to the public pursuant to the MMER under the *Fisheries Act*.²⁹

At a minimum, annual reports should be posted on enforcement and compliance measures, as well as injunctions and prosecutions to enforce the WSER, on a publicly accessible web site or by some other means that is easily accessible. In addition to CSO reporting and reporting on results of environmental monitoring, reports regarding facility compliance with the WSER standards should be made public through this database.

Furthermore, real time public reporting on all sewage related incidents such as deposits out of the normal course of events – that is, any deposit of a deleterious substance that is in excess of a regulatory requirement – as well as reporting on spills, bypasses and overflows should occur to warn the public of potential risk with respect to these incidents as a matter of environmental protection, public health and safety. Public notification of CSO occurrences and impacts is required in the United States under the US Environmental Protection Agency's CSO control policy and affiliated permitting under the US *Clean Water Act*.³⁰ Notification mechanisms can include websites, email notification sent to interested persons, and signage at CSO locations.

Recommendations

11- Reporting on CSO discharges must be made publicly available by Environment Canada under the WSER.

12- The WSER must require that environmental monitoring records and reported results be made publicly available in the form of annual reports

13- The results of CSO reporting, environmental monitoring, and facility compliance with national standards should be housed in a national publicly accessible database established under the WSER.

B. Importance of Monitoring Receiving Environment

Subsection 4(4) of the proposed WSER sets out, as a condition of the authorization to deposit effluent, that an owner or operator carry out environmental effects monitoring in accordance with section 14. Subsection 14(4) states that the provisions of Schedule 2 apply in respect of this environmental effects monitoring. That Schedule contains a description of required water quality monitoring studies and biological monitoring studies. We are pleased to see this requirement present in the proposed regulations.

²⁸ Ontario Ministry of the Environment. Environmental Compliance Reports. Online: <http://www.ene.gov.on.ca/envision/compliance/compliance.htm>.

²⁹ Environment Canada. Summary Review of Performance of Metal Mines Subject to the Metal Mining Effluent Regulations in 2008 (March 2010). Online: <http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=8D9C2C29-1215-4DA5-A9E6-E5DA54A38E79>.

³⁰ United States Environmental Protection Agency, "Combined Sewer Overflow (CSO) Control Policy." (April 19, 1994) Federal Registry Part VII, Vol. 59, No. 75 at p18691.

Further detail is required with regard to the nature of environmental effects monitoring that must be conducted under the WSER. At present, the draft Regulatory text merely states at subsection 14(5) that environmental effects monitoring studies “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.” Our concerns are with regard to the ambiguity of the phrase: “generally accepted standards of good scientific practice”. For instance, by whom are these standards to be accepted? Does “generally” mean that the standards are to be accepted by a preponderance of scientists in Canada who are involved in or have experience in this kind of monitoring? What criteria will be used to determine what constitutes “good” practice?

Discussion of many environmental effects monitoring practices can be found within a 2006 review of the Iona Deep-Sea Outfall Environmental Monitoring Program.³¹ Metro Vancouver is noted to have a good monitoring program, yet it still is missing some elements of good long term monitoring. These include: more extensive tissue collection from keystone species to assess contamination, better evaluation of cumulative effects (in particular in the benthic sediment), better water column monitoring, adding additional biochemical measurements that address emerging contaminants, and ensuring the control/reference sites are in fact not already contaminated.

Recommendations

14- Further detail is required in order to ensure the adequacy of environmental effects monitoring practices required by the WSER.

VII. Temporary Discharge Authorizations

The proposed text of the WSER would allow facilities to receive temporary authorization for the deposit of un-ionized ammonia at a concentration in excess of the limit otherwise established by the proposed Regulations. The limit of 0.016 mg/L for the concentration of ammonia in the receiving environment that is set by the proposed Regulations would have the undesirable effect of authorizing effluent to be deposited even when it is acutely lethal, provided that it is acutely lethal due only to the presence of ammonia.³² Furthermore, the proposed text of the WSER would permit such deposits of acutely lethal effluent to be renewed at three year intervals, and would set no limits to the number of times that a temporary authorization for acutely lethal effluent due to un-ionized ammonia can be sought by the owner or operator of a wastewater system.

In our view, it is important that the WSER not weaken the general prohibition against the deposit of deleterious substances, including wastewater effluents, set out under subsection 36(3) of the *Fisheries Act*. Under no circumstances should wastewater

³¹ Greater Vancouver Regional District, "Peer Review of Cycle 3 of the Iona Deep-Sea Outfall Environmental Monitoring Program" (2006), 2WE Associates Consulting Ltd.

³² Draft WSER at ss. 29(1)(a).

treatment facilities be permitted to release effluent that is acutely lethal. The deposit of an acutely lethal substance necessarily constitutes a violation of the *Fisheries Act* and should not be sanctioned by the Canadian government. The proposed text of the WSER would weaken well-established pollution standards based on acute lethality testing that have been endorsed by appellate courts, and applied specifically in a municipal pollution context including wastewater effluent.

The temporary authorizations that are proposed in sections 36, 37 and 38 of the draft WSER for by-pass of treatment for the purpose of system maintenance present two main problems. First, subsection 36(2)(b) allows the regulatee the “out” of designing a by-pass that minimizes the volume of untreated effluent deposited but only to the extent that is “technically and economically feasible”. This would again appear to be in the eye of the regulatee. What are the criteria to determine what is technically and economically feasible? If the authorization officer disagrees about the design and considers that another design might be more technically and economically feasible as well as provide greater protection to the environment, how is this conflict to be resolved?

Secondly, in subsection 37(g), the regulatee must state the period of time for which the by-pass needs to be authorized. The authorization officer must state the time period for which the temporary authorization is valid when the officer issues it. However, to ensure that the regulatee carries out maintenance in an expeditious and efficient manner and returns to compliance as quickly as possible, the proposed WSER must state that the maximum period of the temporary authorization will not exceed three days, and that the authorization is not renewable. With the current wording, the temporary authorization for a bypass has no time limits, but given that reporting of a deposit must be expressed in hours³³ and the negative impacts of a long term release of untreated sewage, we see this authorization used for only short durations.

Recommendations

15- The WSER must prohibit wastewater treatment facilities from releasing effluent that is acutely lethal to fish. The provisions in section 29 allowing temporary authorization to discharge acutely lethal levels of un-ionized ammonia should be removed or, if temporary authorizations for the deposit of un-ionized ammonia are permitted, no renewals should be allowed.

16- If temporary authorizations for the deposit of un-ionized ammonia are permitted, the WSER must contain a maximum duration for the issuance of temporary authorizations, and no temporary by-pass should exceed three days.

VIII. Review of Regulations

The state of wastewater technology is growing at a rapid rate, as is the scientific knowledge of the impacts of emerging chemicals (including pharmaceuticals and

³³ Draft WSER at ss. 37(h).

endocrine disrupters). Therefore, with a strategy that will be implemented over several decades, there is a need for a mechanism that will allow for new information to be integrated into the strategy and regulations.

Recommendations

17- We recommend that the government mandate a review of the regulations every 5 years in order to include new scientific information regarding treatment technologies and risks from emerging chemicals. This knowledge would allow for changes to be made that would improve the effectiveness of the regulations.

IX. Need for Timely and Effective Enforcement

In order to ensure that the WSER result in positive environmental and human health benefits to Canadians, it is imperative that there be timely and effective enforcement of the standards set out in the Regulations. Despite the length of the transitional authorizations that will be issued under the WSER and the costs associated with regulatory enforcement measures, we believe it is imperative that Environment Canada take necessary steps to ensure compliance with the national treatment standards set out in the Regulations. Environment Canada should adopt a zero tolerance approach to violations of the WSER standards.

Recommendations

18- Environment Canada must take all necessary steps to ensure strict enforcement of the standards set out under the WSER.

X. Regulations are Contrary to the Fisheries Act and International Agreements

Given that the proposed Regulations would permit a large number of wastewater treatment facilities across Canada to remain in noncompliance with national treatment standards for up to 30 years, and that there are no enforceable targets set for reductions of CSOs, the effect of the WSER would be to sanction the deposit of vast quantities of deleterious substances over an extended period of time into Canadian waters frequented by fish. Given the significance of the environmental and human health risks posed by undertreated wastewater effluent and unplanned discharges such as CSOs, the draft WSER do not adequately protect fish and fish habitat, and are inconsistent with the purposes and objects of the Fish Habitat Protection and Pollution Prevention provisions of the *Fisheries Act*.

Furthermore, Canada and United States are in the midst of reviewing and revising the revised 1978 Great Lakes Water Quality Agreement (“GLWQA”) in the spirit of strengthening the agreement. The GLWQA calls for programs to abate, control and prevent pollution from municipal sources entering the Great Lakes System, including

measures to reduce pollution from CSOs.³⁴ The most recent biennial report of the International Joint Commission (“IJC”) on Great Lakes water quality, published in 2009, focuses on municipal sewage impacts in the Great Lakes basin and discusses the CSO problem in particular. The IJC makes several recommendations, calling for improvements in sewage management in the basin.³⁵

In the absence of national standards to date, and enforceable targets for CSOs in the proposed Regulations, the Federal government is proposing Regulations that are fall short of the spirit and intent of the GLWQA. The federal government, by proposing such weak Regulations that fail to abate CSOs, is not demonstrating a commitment to improving Great Lakes water quality during this important time of negotiations with the US.

XI. Conclusions

The goal Ecojustice, the Canadian Environmental Law Association, Georgia Strait Alliance, the T. Buck Suzuki Environmental Foundation, Friends of the Earth, and Great Lakes United in submitting these comments is the same as that of Environment Canada and the federal government: to secure a national regulation under subsections 34(2), 36(5) and 38(9) of the *Fisheries Act* that:

- will reduce the risk that effluent from publicly owned wastewater facilities to fish and water frequented by fish as these terms are defined in the *Fisheries Act*;
- will reduce that risk in a timely manner;
- contains environmental effects monitoring requirements that will yield data to demonstrate the progressively improved aquatic environment that receives deposits of effluent from publicly owned wastewater facilities; and
- is strictly enforced.

We would be pleased to provide further comments on future drafts of the WSER and to participate in meetings and face-to-face consultations on these important regulations.

As discussed in the submissions above, we recommend that the following changes be made to the draft WSER in order to ensure the goals of protecting the environment and human health are achieved in an effective and precautionary manner:

- 1-** The proposed timelines for transitional authorizations should be shortened to five years (or 2015) for high risk facilities, ten years (or 2020) for medium risk facilities, and 15-20 years for low risk facilities. This would still allow the estimated 5.9 billion dollars in infrastructure costs to be distributed over several decades, and would allow municipalities to plan their tax rates, secure whatever federal and/or provincial/territorial funding is available, and maintain other municipal services while progressing towards compliance with the WSER

³⁴ International Joint Commission. Great Lakes Water Quality Agreement. Article VI, online: <http://www.ijc.org/en/activities/consultations/glwqa/agreement.php>.

³⁵ International Joint Commission. “14th Biennial Report on Great Lakes Water Quality” (August 2009) at pp 23-25. Online: <http://www.ijc.org/php/publications/pdf/ID1631.pdf>.

standards. It would also allow the 17.6 billion dollars in benefits to be realized sooner.

2- Municipalities must demonstrate the need for a transitional authorization based on strict and transparent financial criteria rather than just based on the level of risk points. In other words, if a municipality can afford to upgrade to meet the WSER under a shorter timeframe, it should be required to, and should not be permitted to use a transitional authorization as a means of delaying action.

3- We recommend that CSO risk points, and the filing of a CSO plan, should not be used to allow a final effluent of high or medium risk to jump to the low risk transitional authorization timeframe, such that compliance with the WSER is delayed until December 31, 2029. The loophole in subsection 23 (2)(c)(ii) should be removed.

4- We recommend that the points system for determination of the transitional authorization period be determined by the government, or audited by the government if determined by the operator, to ensure accuracy.

5- Environment Canada fishery officers and/or fishery inspectors should inspect wastewater treatment facilities and their related equipment, such as final discharge points, sewer outfalls and combined sewer overflows, etc., in order to verify that information set out by owners and operators of those facilities in applications for transitional authorizations is accurate and complete.

6- We recommend that the points system be expanded to recognize additional risks that final effluent discharges pose to the receiving environment and to fish and fish habitat, so as to conform with the precautionary principle, the goals of fish habitat protection and pollution prevention, and protection of critical habitat for species at risk. For example, the risk points should incorporate considerations for negative impacts on endangered species and their habitat, as well as eutrophication of waters, and should ensure more timely restoration of degraded water and/or sediment quality.

7- We further recommend that the points system of the proposed WSER be expanded to include national marine parks under the *Canada National Parks Act* and marine protected areas under the *Oceans Act*.

8- We recommend the creation of an additional category of system size in order to better assess impacts of the largest sewage treatment systems.

9- The Regulations should include enforceable reduction targets for CSOs. We recommend an interim target of 50% reduction in five years and requirements for the eventual elimination of all unplanned discharges, including SSOs and CSOs, within ten years.

10- The Regulations must recognize that the standard as set out may not sufficiently protect all receiving waters and must contain more stringent standards for deposits of wastewater effluent into Canadian waters as necessary (e.g. where there are pre-existing eutrophication concerns).

11- Reporting on CSO discharges must be made publicly available by Environment Canada under the WSER.

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13- The results of CSO reporting, environmental monitoring, and facility compliance with national standards should be housed in a national publicly accessible database established under the WSER.

14- Further detail is required in order to ensure the adequacy of environmental effects monitoring practices required by the WSER.

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16- If temporary authorizations for the deposit of un-ionized ammonia are permitted, the WSER must contain a maximum duration for the issuance of temporary authorizations, and no temporary by-pass should exceed three days.

17- We recommend that the government mandate a review of the regulations every 5 years in order to include new scientific information regarding treatment technologies and risks from emerging chemicals. This knowledge would allow for changes to be made that would improve the effectiveness of the regulations.

18- Environment Canada must take all necessary steps to ensure strict enforcement of the standards set out under the WSER.

Yours truly,

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