



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

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Halifax Regional Council
February 20, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

A handwritten signature in black ink, appearing to read "Dan English", written over a horizontal line.

Dan English, Chief Administrative Officer

A handwritten signature in black ink, appearing to read "Wayne Anstey", written over a horizontal line.

Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE: January 23, 2007

SUBJECT: **Canadian Council of Ministers of the Environment (CCME) Draft
Wastewater Strategy**

ORIGIN

The Canadian Council of Ministers of the Environment (CCME) has released a draft "Canada-Wide Strategy for the Management of Municipal Wastewater Effluent" for review and comment.

RECOMMENDATION

It is recommended that Council endorse the staff comments as provided in Appendix A of this report, for provision to CCME by the March 1, 2007 deadline.

BACKGROUND

The Canadian Council of Ministers of the Environment (CCME) has released a draft “Canada-Wide Strategy for the Management of Municipal Wastewater Effluent” for review and comment. Development of a strategy began in December of 2003 with the national Municipal Waste Water Effluent initiative. The release of a draft national Strategy was endorsed by the CCME Ministers on October 11, 2006. The document was made available for comment by stakeholders, and a series of regional workshops was conducted by CCME and the provinces in various locations, including HRM in December of 2006. HRM staff have reviewed the draft Strategy document, and have developed a number of comments for consideration by CCME (Appendix A). The deadline for comments is March 1, 2007. The intent of CCME is that the final version of the Strategy will be completed by fall, 2007, and subsequently adopted and implemented through regulation by each of the provinces. The final Strategy will include national standards for management and treatment of municipal wastewater effluent.

DISCUSSION

The draft strategy advocates a risk-based approach to management of municipal wastewater effluent, in which requirements are based on environmental and health risk assessments which are to be carried out for all treatment facilities. However, the draft strategy departs from a true risk-based approach in advocating a uniform minimum national standard for all effluent.

The draft Strategy, if implemented, could have significant consequences for HRM. The Strategy proposes a uniform national standard for treatment of municipal wastewater which is equivalent to secondary treatment. HRM’s inland treatment plants which discharge to fresh waters already provide secondary or better level treatment, as does the Mill Cove plant on Bedford Basin. However, the Eastern Passage treatment plant is currently primary level, and the three new Harbour Solutions plants are advanced-primary level. HRM plans to upgrade the Eastern Passage plant to secondary as part of the planned \$30M expansion. If upgrade to secondary level is required for the HHSP plants, the capital upgrade costs would exceed \$100,000,000 for HRM. Under one option proposed in the draft strategy, medium-risk facilities would be required to comply with the national standard within 10-20 years of adoption of the Strategy. Under ranking criteria proposed by CCME, HRM’s primary plants would likely be in this medium risk category. Other options proposed would allow a plant to continue with existing discharge requirements until the end of operational life up to a 30-year maximum; another option would not set timelines until funding options are identified. If a risk assessment indicates that secondary treatment is required, HRM would advocate not setting timelines until funding options and sources are identified. CCME has estimated total national costs to comply with the Strategy at between \$8 and \$13 billion. Operational costs are also not considered. In HRM’s opinion, this estimate is low, as it does not include collection system upgrades. For HRM, the costs to mitigate wastewater releases (combined and sanitary sewer overflows) within the collection system will be much greater than the cost to upgrade treatment plants to secondary level, especially where we have such a high proportion of combined sewers and depending upon the criteria. Elimination of overflows through system upgrades or sewer separation will be very onerous financially, and the risks and benefits must be quantified. Best options should

be identified through site-specific study. At this time, there is no commitment of funds for the costs of any required upgrades from either the federal or Provincial levels.

The draft strategy considers the possibility of a waiver for marine discharges, but the waiver may only apply to smaller facilities. HRM's position is that a waiver for marine discharge is necessary regardless of size. The concept of risk-based management should allow for an assessment of the environmental and health risks associated with each facility, and base decisions on the assimilative capacity of the receiving waters. This is the approach which HRM has used to determine that advanced-primary level treatment was appropriate to meet the defined water quality objectives for Halifax Harbour.

While secondary-level treatment may be a desirable goal at a conceptual level, there are practical implications for HRM if this becomes the required standard. Upgrade of the Eastern Passage and Harbour Solutions plants will divert significant resources from other important priorities such as maintenance and upgrade of existing collection systems, pumping stations and treatment plants. Combined sewer overflows (CSOs) and Sanitary Sewer Overflows (SSOs) presently occur at a number of points in the HRM collection systems. The most significant operational/regulatory issue with HRM's wastewater system is wet weather flow, and resultant overflows into the environment and under-treatment of our wastewater during those wet weather events. Many of our sewers are combined, built many decades ago, and sometimes greater than 100 years ago. Combined sewers have not been permitted in HRM since the 50s or 60s, but even the older separate sanitary sewers have heavy wet weather flow problems. Newer systems, built to a higher standard, are not a problem from a wet weather flow perspective.

Of approximately 170 pumping stations in HRM, some 40 experience regular overflows in high-volume conditions. Many of these overflows go to inland receiving waters (lakes and rivers), and as such represent much higher environmental and health risks than marine discharge of primary-treated effluent. Much of our capital and operating budget is used to mitigate these wet weather flow problems, and we have developed a priority ranking process to assist in determining where available funds should be invested. HRM would prefer to allocate limited resources based on risk and assessed priority, rather than on the basis of a national standard which does not consider local conditions. Definition of funding mechanisms and cost-sharing arrangements will be a critical element should the national standard be adopted.

The draft strategy also proposes that CSOs will not increase in frequency due to development. Where existing zoning within a sewershed allows for further development, a municipality may not have the authority to limit development based only on the likelihood of an increase in CSO frequency. This will mean that, if adopted, this provision would require action at the provincial level to limit development, since this is a matter beyond municipal authority under planning legislation in Nova Scotia.

The Strategy proposes a model Sewer Use By-law for adoption on a national basis. HRM has a sewer use by-law in place, and would support adoption of the national model by-law. This would require some adjustments to the existing HRM By-law W-101 to include provisions in the model

by-law relating to: requirements for reporting of spills impacting municipal infrastructure by the responsible party; preparation of pollution prevention plans by industry to be registered with the municipality; inclusion of some priority substances on the restricted list; and other language changes.

Adoption of the Strategy could include formal federal-provincial agreements. One aspect of these agreements may include regulations under the federal Fisheries Act to clarify requirements relating to release of deleterious substances in municipal wastewater effluent. At present, the Fisheries Act makes release of any deleterious substance an offense, so clarity and definition would be desirable.

HRM staff have developed the attached detailed comments (Appendix A) for submission to CCME by the March 1 2007 deadline.

BUDGET IMPLICATIONS

Unknown at this time. If the final national Strategy requires the equivalent of secondary treatment for all municipal wastewater effluent, then there will be significant budget implications for HRM. Funding mechanisms, cost-sharing arrangements and implementation timeframes for any final regulations resulting from the Strategy are not yet defined by CCME or the province. At this time, there is no commitment of funds for the costs of any required upgrades from either the federal or Provincial levels. As a result, staff have clearly stated in the response to CCME that “funding sources and mechanisms must be clearly identified, with funding commitments from federal and provincial jurisdictions, before the strategy is implemented”, and that “full cost-sharing by provincial and federal levels will be required to meet the proposed national standards”.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality’s Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

None recommended.

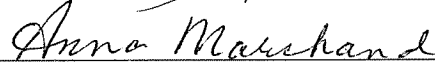
ATTACHMENTS

Appendix A - Detailed HRM comments to CCME (using CCME comment template).

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Tony Blouin, Manager of Environmental Performance, 490-4610

Report Approved by: 
Brad Anguish, Director, Environmental Management Services, 490-4825

Financial Approval by: 
for Catherine Sanderson, Senior Manager, Financial Services, 490-1562

Appendix A - Detailed HRM Comments to CCME

Options for a Canada-wide Strategy for the Management of Municipal Wastewater Effluent	
Consultation Document Comments Template	
Your Contact Information - PLEASE FILL IN	
Name	Tony Blouin
Organization	Halifax Regional Municipality
Mailing Address	PO Box 1749, Halifax, NS, B3J 3A5
Phone	(902) 490-4610
Fax	(902) 490-5862
Email	blouint@halifax.ca
Section	Your Comments
PART A: PERFORMANCE REQUIREMENTS	
	General Comments on Performance Requirements:
	No rationale is given why the strategy will not apply to privately-owned wastewater facilities, whose impacts are the same as public facilities.
	Setting minimum national performance standards for CBOD, TSS and CI is not compatible with a truly risk-based approach, as it does not allow for differences in receiving waters and ecological/health risks. Exceedance of the standards may or may not imply any significant risk, depending on the situation.
	A waiver for marine discharges (as per USEPA 301(h)) is crucial for facilities of all sizes (EPA does not limit to specific sizes), to recognise significant differences in assimilative capacities of marine vs fresh receiving waters.
Part A, Section 1 (page 3)	1. Environmental Risk Management
	General Comments on Environmental Risk Management:
	Risk-based environmental management is the correct approach. The proposed framework is not truly risk-based, as the national standards supercede the results of the Environmental Risk Assessment, regardless of whether this makes sense in specific cases. When comparing National Standards to the Effluent Discharge, the correct decision path should be to a Risk Management Decision, not automatically to Opportunities for Reduction. The Risk Management Decision allows consideration of environmental, social and economic factors in determining if further action is necessary or possible.
	The proposed performance standards are essentially stipulating a minimum national standard of secondary treatment. If this was truly an exercise in risk management then an environmental risk assessment would be used to determine the minimum level of treatment required for a given receiving water.
Part A, Section 1.1 (page 4)	1.1 National Performance Standards
	General Comments on National Performance Standards:
	See above - adoption of national standards is not true risk-based management.
	The monitoring frequencies for "Basic" characterization are inadequate for all but the "very small" and "large" facilities. Provincial requirements in Nova Scotia are already more frequent so why not capitalize on the additional data. Small facilities should be weekly, medium facilities should be twice weekly and large should be daily.
page 4)	Options listed:
	(i) <i>Options for existing facilities</i>
	(ii) <i>Considerations for northern conditions</i>
	Comments on Options:
	For existing facilities, a marine discharge waiver is a necessity to recognise the differing assimilative capacity of marine waters. This waiver must apply to all sizes of facility.
Box 1 (page 5)	Box 1 – Questions for Stakeholders - NATIONAL PERFORMANCE STANDARDS AND EXCEPTIONS
Box 1, Question 1	1. Are the 3 National Performance Standards identified reasonable? What other parameters and limits should be considered?
	No - see above. Meeting a minimum of secondary-equivalent standards may not make sense for a marine discharge to a receiving water with ample biological and physical assimilative capacity, and will draw crucially needed resources from addressing other priorities such as aging sewer infrastructure, CSOs, SSOs, etc.
	The requirement of 25 mg/L for CBOD and TSS may be difficult to achieve even for secondary level facilities, perhaps 30 mg/L might be more appropriate as a minimum.

Box 1, Question 2	2. Among the options presented as exceptions to the National Performance Standards, which ones do you feel are the most reasonable and why? For what time period, if any, should these exceptions remain valid?
	Exceptions for marine discharge are reasonable, and valid as long as risk assessment and assimilative capacity analyses show no likelihood of significant impacts.
Box 1, Question 3	3. Are the facility size classifications reasonable? Can you suggest a better group of size classes or delineation between them, especially between Small and Very Small? Note the linkages to initial characterization, effluent monitoring and exceptions to National Performance Standards.
Box 1, Question 4	4. Are the considerations for Canada's Far North appropriate? Can you suggest others?
Part A, Section 1.2 (page 5)	1.2 Environmental Risk Assessment and Effluent Discharge Objectives
	General Comments on Environmental Risk Assessment and Effluent Discharge Objectives:
(page 7)	<i>Options listed for completion of Environmental Risk Assessment</i>
	<i>Comments on Options:</i>
Box 2 (page 8)	Box 2 – Questions for Stakeholders - ENVIRONMENTAL RISK ASSESSMENTS AND EFFLUENT DISCHARGE OBJECTIVES
Box 2, Question 1	1. Are the approaches to initial characterization, environmental risk assessment and the development of effluent discharge objectives reasonable (also see information in Appendices A, B, and C)?
	Option 2 is preferred.
Box 2, Question 2	2. Are there other approaches to site-specific risk management that should be considered?
	Marine vs fresh receiving water must be considered, as the degree of risk and resulting management approach will vary between them.
	The strategy recognises that technical, financial and societal reasons may determine that nothing further can be done. Particularly in relation to financial considerations, a full analysis of funding sources and arrangements (ie cost-sharing between levels of government) must precede any final decisions on risk management.
Box 2, Question 3	3. What other options should be considered for conducting the environmental risk assessment?
Box 3 (page 8)	Box 3 – Questions for Stakeholders - SUBSTANCES OF POTENTIAL CONCERN
Box 3, Question 1	1. Is the range of tests identified in Appendix D adequate for the initial characterization of wastewater? Are there classes or combinations of substances that should be added?
	The list should be adequate.
	The range of tests is adequate though it is not clear why flouride would be included.
Box 3, Question 2	2. Who should collect this data?
	Municipal authorities, in collaboration with provincial government; or alternately, an independent agency with appropriate expertise.
Part A, Section 1.3 (page 9)	1.3 Reduction at Source
	General Comments on Reduction at Source:

Box 4 (page 9)	Box 4 – Questions for Stakeholders - REDUCTION AT SOURCE
Box 4, Question 1	1. Which approach(es) to managing sources do you think would be the most effective? Why?
	Substance-based approaches would be most effective - HRM has adopted this approach with our Sewer Use By-law as it directly addresses the substances of concern.
Box 4, Question 2	2. Should source reduction targets be set? If so, provide specific details.
	Source reduction targets applicable to specific industrial, commercial or institutional point sources are appropriate, and provide a basis for enforcement.
Part A, Section 1.4 (page 9)	1.4 Monitoring
	General Comments on Monitoring:
Part A, Section 1.4, subsection (i)	(i) Compliance Monitoring
	General Comments on Compliance Monitoring:
Part A, Section 1.4, subsection (ii)	(ii) Toxicity Testing
	General Comments on Toxicity Testing:
	Toxicity testing may be problematic if local capacity and/or expertise does not exist at available labs.
Box 5 (page 11)	Box 5 – Questions for Stakeholders - COMPLIANCE MONITORING AND TOXICITY TESTING
Box 5, Question 1	1. Are monitoring frequencies reasonable and adequate? Identify and discuss alternative options for monitoring.
Box 5, Question 2	2. Should acute lethality testing be a regulated parameter or should it be used as a trigger for toxicity reduction evaluation?
Box 5, Question 3	3. What specific requirements and timelines should be included in a toxicity reduction evaluation process for municipal wastewater effluent?
Box 5, Question 4	4. The focus for ammonia only is chronic toxicity. Is this approach acceptable?
	Yes, this is consistent with CEPA requirements.
Box 5, Question 5	5. After a failed acute lethality test, there is a requirement for increased testing frequency. When should the increased testing frequency be terminated?
	Once acute lethality has been reduced to acceptable levels after a predetermined continuous number of samples, or a risk-based management decision is made that no further reduction is necessary or possible.
Part A, Section 1.4, subsection (iii)	(iii) Environmental Monitoring
	General Comments on Environmental Monitoring:
	HRM has noted in results of our sampling for Halifax Harbour (receiving water for several STPs) that choice of appropriate detection limits is critical - for example, most metals and BOD are undetectable at standard lab detection limits in Halifax Harbour, in spite of inputs of untreated sewage.

	It is difficult to provide detailed comment when the "Environmental Monitoring Guidance Document" is not yet available. Finalisation of the Strategy should not take place prior to an opportunity for stakeholders to review this document.
page 12)	Options listed for Environmental Monitoring
	Comments on Options:
	Option 2 - determination of requirements by each jurisdiction - is strongly preferred, as local conditions should determine the monitoring needs.
Box 6 (page 12)	Box 6 – Questions to Stakeholders - ENVIRONMENTAL MONITORING
Box 6, Question 1	1. What do you think of the proposed environmental monitoring requirements (see <i>Environmental Monitoring Guidance Document</i>)? What changes would you suggest?
	Impossible to respond as the referenced document is not available.
Box 6, Question 2	2. What factors (facility size, industrial input, sensitivity of receiving environment, etc.) should be considered in determining the level of environmental monitoring required at a facility?
	In addition to those mentioned, the nature of the receiving water (stream, river, lake, marine estuary, marine open coast, etc.) and the uses of the receiving water should be included.
Box 6, Question 3	3. Should environmental monitoring be mandatory or voluntary? Should it apply to all wastewater facilities or only a subset?
	Should be determined by the provincial jurisdiction for each facility.
Box 6, Question 4	4. Should environmental monitoring requirements be the same across the country or determined by each jurisdiction?
	Determined by each jurisdiction.
Part A, Section 1.5 (page 13)	1.5 Combined Sewer Overflows and Sanitary Sewer Overflows
	General Comments on Overflows:
	The stipulation that there must be no increase in CSO frequency due to development may be a matter beyond the control of municipalities. Under provincial planning legislation, a municipality may not have the authority to limit development within a watershed that would normally be permitted by existing zoning, regardless of CSO impacts. Provinces must recognise that they may be required to regulate development to limit CSO frequency.
	Combined sewer overflows can be difficult to quantify in terms of frequency and quantity. A means of "policing" overflows needs to be formulated.
	This section references "elimination" of CSOs and SSOs. This statement is too simplistic and the consequences of implementing such a requirement, full elimination of CSOs and SSOs, would be extremely onerous financially, and likely of low benefit. Instead, the elimination of CSOs and SSOs should be tied to a certain frequency or rainfall event, based again on risk. There is a tremendous variation in cost to eliminate wet weather overflows according to varying frequencies, e.g. to limit overflows to a once in 100 year occurrence is much more costly than limiting the overflow to once every five years..
	This section also says that an objective is to eliminate CSOs by "combined sewer separation". This statement is also too simplistic and the consequences of implementing such a requirement, i.e. separating all combined sewers, would be extremely onerous financially (approximately \$800 million for HRM), and in some circumstances, might not be the best solution at all. Sewer separation is one of many mitigatory options available where sewers are currently combined, and the best option is best identified through a site specific study.
	Another very relevant aspect is that the stormwater component of combined flows and of wet weather flows in separate sewers typically gets some level of treatment now, at least up to the point where overflow occurs. Given that stormwater is also polluted, there will be a negative aspect to removing stormwater from the treatment process, from that perspective.
	"Item 3. Owners must demonstrate that everything that can be done with existing equipment is being done to limit combined sewer and sanitary sewer overflows." This statement basically says that owners must operate their systems at maximum efficiency. Such a statement is not typical in a regulation but it is not a bad one. However, it is better to say it for all components of the system, not just relative to CSOs and SSOs.
Box 7 (page 14)	Box 7 – Questions for Stakeholders - SEWER OVERFLOWS
Box 7, Question 1	1. Should implementation of combined sewer overflow measures be linked to funding (e.g., more funding with better combined sewer overflow control)?
	The two need to go hand-in-hand. Better CSO control can only be achieved by municipalities with appropriate funding from provincial and federal levels.
	Sinking more money into a treatment facility without adequately addressing collection system issues is wasteful. In many cases there can be a significant increase in the performance of a treatment facility through upgrades to the collection system.

Box 7, Question 2	2. Should implementation of combined sewer overflow management be linked to the rest of the strategy?
	Yes.
Box 7, Question 3	3. Do the national overflow standards seem reasonable? If not, how should they be modified?
	No - the receiving water assimilative capacity and degree/risk of impacts need to be considered.
Box 7, Question 4	4. What is a reasonable timeframe for the elaboration and implementation of long term overflow reduction plans (Requirement 4)?
	10-20 years.
Part A, Section 2 (page 4)	2. Science and Research
	General Comments on Science and Research:
	Maintenance of Research Inventories is an important issue from the point of view that owners and operators of wastewater systems can benefit greatly from effective and efficient knowledge transfer related to emerging approaches and technologies in the field.
page 16)	<i>Options for Science and Research</i>
	<i>Comments on Options:</i>
	An independent committee led by government would be the preferred option.
Box 8 (page 16)	Box 8 – Questions for Stakeholders - SCIENCE AND RESEARCH
Box 8, Question 1	1. How would you set priorities for research?
	Through the independent committee, with input from municipalities.
Box 8, Question 2	2. Do you have research priorities which are important to you?
Box 8, Question 3	3. Should research be coordinated through the CCME or through an independent body (e.g. Canadian Water and Wastewater Association or Canadian Water Network)?
Box 8, Question 4	4. What is the best mechanism to ensure an increased linkage between environment and health concerns resulting from municipal wastewater effluent discharged to surface waters?
	Regular monitoring of surface water quality.
Box 8, Question 5	5. How should co-ordinated wastewater research be funded?
	Through CCME, ie. Federal and provincial governments.
Part B (page 16)	PART B: IMPLEMENTATION
	General Comments on Implementation:
Part B, Section 1 (page 6)	1. Governance
	General Comments on Governance:
	The draft strategy does not explain what is meant by "Water Management Instruments".
Part B, Section 1.1 (page 17)	1.1 Harmonized Regulatory Framework for Sources

	General Comments on Sources:
	By-laws should be implemented as part of a minimum and standardized Pollution Prevention program which is composed of permitting, education and by-law enforcement to provide industry with a level playing field across Canada.
	The strategy in Appendix F Model Sewer Use Bylaw, Part 8 page 128 provides for spill response management. The part only refers to spills to wastewater works and should be expanded to include Stormwater systems as well.
Box 9 (page 17)	Box 9 – Questions for Stakeholders - HARMONIZED REGULATORY FRAMEWORK FOR SOURCES
Box 9, Question 1	1. Should the proposed model sewer bylaw be adopted?
	Yes, the Model Sewer-Use By-Law should be a mandatory minimum standard for any municipality or operating authority.
	Two options are presented for implementing a Sewer Use Bylaw: voluntary and linked to funding. It is surprising that the policy would not simply make it a mandatory requirement for all municipalities, given the apparent (and appropriate) concern about the presence of (often) untreatable compounds in the liquid waste stream. That seems to be the most appropriate option. HRM currently has a P2 program, and by policy, HRM has indicated the importance of such a program.
	The notion of minimum secondary level treatment as a requirement of the Strategy may be rooted in an understanding that some compounds are adequately treated by secondary level treatment, which will depend upon the compound in question. However, this seems a heavy handed and costly approach, especially where the more advanced thinking is that such compounds are better prevented at source, rather than treatment at end of pipe. (Even this draft strategy says this at Section 7.1 of Appendix A. Seems like a contradiction if the reason for minimum secondary is as per above.)
Box 9, Question 2	2. Should implementation of a sewer bylaw be linked to funding? Or should it be voluntary?
	Linked to funding, but only under the condition noted above.
Box 9, Question 3	3. What specific water management instruments would you recommend using? Why?
	The strategy suggests (Page 101, "Permitting and Wastewater Rates") that wastewater rates for industries be established based on the amount of discharge. Typically, most municipalities recover wastewater rates by water consumption. The measurement of discharge rates by individual industries may be problematic and prone to error.
	It is suggested that water consumption be utilized as the primary unit of measurement for industrial billing. There may be exceptions that the municipality may wish to address with site specific monitoring and this should remain as an option to the municipality or operating authority.
Box 9, Question 4	4. Should the strategy address product controls?
	Depends on what types of controls are contemplated, and who is responsible for enforcing such controls.
Part B, Section 1.2 (page 18)	1.2 Harmonized Regulatory Framework for Releases
	General Comments:
	Adoption of site-specific standards should be the overriding approach.
Page 19)	<i>Options for Managing Releases</i>
	<i>Comments on Options.</i>
	CCME Guideline on site-specific standards, referenced by jurisdictions, is the preferred approach.
Box 10 (page 19)	Box 10 – Questions for Stakeholders - HARMONIZED REGULATORY FRAMEWORK FOR RELEASES
Box 10, Question 1	1. What approach for managing releases would be the most effective? The least effective? Why?
	Site-specific standards would be most effective as they are designed for local conditions.
Box 10, Question 2	2. For site-specific standards, should required procedures be written into jurisdictional regulatory instruments or should they be written into a CCME guideline that jurisdictions could then reference?
	CCME Guideline on site-specific standards, referenced by jurisdictions, is the preferred approach.
Box 10, Question 3	3. Should an administrative agreement for municipal wastewater effluent be developed that is specific to a regulation under the <i>Fisheries Act</i> ? Or should such an agreement be broader, addressing the release of all deleterious substances including municipal wastewater effluent?
	Broader.
Part B, Section 1.3 (page 19)	1.3 Public Reporting
	General Comments:

page 19)	Options for Public Reporting
	Comments on Options:
Box 11 (page 20)	Box 11 – Questions for Stakeholders - PUBLIC REPORTING
Box 11, Question 1	1. Which of the three options would be the most practical and effective? Why?
	Facilities report annually on operating permit requirements. This reduces additional workload on municipalities since facilities already prepare such reports.
Box 11, Question 2	2. What is your preferred mechanism for public reporting?
	Web site.
Part B, Section 2 (page 20)	2. Implementation Timelines
	General Comments on Implementation Timelines:
	Requirements for existing facilities (including those funded and under construction) should be maintained, not enhanced unless federal/provincial funding is identified.
	There cannot be an informed position on timelines to implement until there is confidence in the accuracy of the cost estimates (See Part C below).
page 20)	Options for Implementation Timelines
	Comments on Options:
	Option 3 is the only feasible approach, as many municipalities and utilities are struggling to maintain existing performance under current funding levels.
Box 12 (page 22)	Box 12 – Questions for Stakeholders - IMPLEMENTATION TIMELINES
Box 12, Question 1	1. Which option for implementation do you think is best? Would you make any modifications? Please provide details.
	Option 3.
Box 12, Question 2	2. In Option 1, the time frames (corresponding with high, medium, and low risk facilities) for implementation of the strategy are proposed as "reasonable timelines" (pending funding). What other timelines could be considered? Are there other options for implementation, (other than based on a risk classification), that should be considered?
Box 12, Question 3	3. How do you define end-of-life? How would you use this concept to prioritize investment?
Box 12, Question 3	4. How would you broadly prioritize investments to ensure the critical issues are dealt with?
	Base priorities on defined risk management criteria.
Part B, Section 3 (page 23)	3. Review/Evaluation and Reporting on Progress
	General Comments on Review/Evaluation/Reporting on Progress:
Box 13 (page 23)	Box 13 – Questions for Stakeholders - REVIEW/EVALUATION AND REPORTING ON PROGRESS
Box 13, Question 1	1. Are the proposed reporting timelines reasonable? If not, what should be changed?
Box 13, Question 2	2. What else should be reported on and to whom?

Part B, Section 4 (page 4)	4. Administration
	General Comments on Administration:
Part B, Section 5 (page 4)	5. Future Work
	General Comments on Future Work:
Box 14 (page 24)	Box 14 – Questions for Stakeholders - FUTURE WORK
Box 14, Question 1	1. What additional areas of work are required at a national level as a result of implementation of the strategy?
Part C (page 24)	PART C: ECONOMIC IMPLICATIONS
	General Comments on Economic Implications:
	The draft Strategy recognises that "facility owners have many competing priorities and infrastructure needs". Meeting a national standard that may not have relevance to local conditions will detract from owners ability to meet those other priorities. For this reason, funding sources and mechanisms must be clearly identified, with funding commitments from federal and provincial jurisdictions, before the Strategy is implemented.
Part C, Section 1 (page 4)	1. Estimated Capital Costs
	General Comments on Costs:
	Halifax Regional Municipality is constructing 3 new advanced-primary level treatment plants which will discharge to Halifax Harbour. Modelling indicates that these plants will meet established water quality objectives for the Harbour, and the plants have received federal and provincial approvals. HRM estimates that the capital cost to upgrade these 3 new plants to meet a secondary-level requirement under a national standard will be up to \$100,000,000.
	Wastewater Treatment Infrastructure costs are presented as \$8 billion and \$13 billion. Our understanding (from the stakeholder consultation sessions) is that these do not include capital costs related to collection systems for work related to SSOs and CSOs. In HRM, we estimate that the collection system costs will be much greater than the treatment costs. Our thinking is that the costs should include collection, not just treatment, so as to be comprehensive.
Part C, Section 2 (page 4)	2. Funding
	General Comments on Funding:
	Full cost-sharing by provincial and federal levels will be required to meet the proposed national standard.
Box 15 (page 25)	Box 15 – Questions for Stakeholders - ECONOMIC IMPLICATIONS
Box 15, Question 1	1. Have municipalities and communities explored alternative options to help manage costs and improve wastewater services (i.e., considered working with neighbouring municipalities/communities and sharing services)?
	Yes. HRM is in the process of amalgamating our water and wastewater services under a single regulated utility to better manage costs and funding.
Box 15, Question 2	2. Have municipalities/communities undertaken full cost accounting exercises for municipal wastewater services?
	Not yet.
Box 15, Question 3	3. Should full cost accounting be mandatory?
	No.

Box 15, Question 4	4. Are municipalities currently recovering the full costs (capital and operating) associated with wastewater services? If not, do they have a strategy in place to pay for the full cost of providing this service?
	See #1 above.
Box 15, Question 5	5. In what ways can all levels of government better assist municipalities in improving wastewater services?
	Consideration of local conditions, receiving waters and true environmental/health risks in a flexible approach; provision of funding.
Box 15, Question 6	6. In what ways do you think an approach to pricing and financing could be more responsive/suitable to and/or respectful of local conditions?
	Adapt requirements to the risk levels which are determined by local conditions, rather than impose a national standard which may not be suited to local conditions. The primary example is consideration of marine vs freshwater discharges, which may carry very different levels of environmental impact and risk.
Do you have any ADDITIONAL COMMENTS?	
	The most significant operational problem and regulatory issue with HRM's wastewater system is wet weather flows, and resultant overflows into the environment and under-treatment of our wastewater during those wet weather events. Many of our sewers are combined, built many decades ago, and sometimes greater than 100 years ago. Combined sewers have not been permitted to be constructed in HRM since the 50s or 60s, but even the older separate sanitary sewers have heavy wet weather flow problems.
	Newer systems, built to a higher standard, are not a problem from a wet weather flow perspective.
	Much of our capital and operating budgets is used to mitigate these wet weather flow problems, and we have developed a priority ranking process to assist in determining where available funds should be invested.
	HRM is very concerned about the imposition of a unilateral requirement for secondary level of treatment for all wastewater treatment facilities, both new and existing. We are in the process of completing construction of three new advanced primary wastewater treatment plants, all three of which discharge to a marine environment. The cost to upgrade the three plants to a secondary level of treatment will cost in excess of \$100 million. In our view, these funds would be much better invested in addressing the wet weather flows (and resultant impacts) and other wastewater priorities, using a risk-based approach, which would quite likely result in us investing our limited funding into some other parts of our wastewater system, specifically those which discharge into a freshwater environment..
	For Halifax Regional Municipality, the solutions to our SSO problems in the older parts of our separate sewer systems are very costly. Recent work that we have done suggests that the cost to address our SSO problems comprehensively will be much greater than \$100 million in capital cost. Again, a risk-based approach would be a more appropriate manner of determining where to direct funding, rather than being obligated to invest in secondary-level treatment for treatment plants that discharge into a marine environment.