

Canadian Council of Ministers of the Environment Le Conseil canadien des ministres de l'environnement

# **Summary of Consultation Comments**

Canada-wide Strategy for Managing Municipal Wastewater Effluent Municipal Wastewater Effluent Development Committee May/June 2005

### Introduction

A second round of consultation with municipalities was completed by the Municipal Wastewater Effluent Development Committee in May and June 2005. Regional or provincial/territorial meetings were held for municipal representatives during this period:

- May 17, 2005 Amherst Nova Scotia Jurisdictions represented included Nova Scotia, New Brunswick, Prince Edward Island, and Canada.
- May 19, 2005 St John's, Newfoundland and Labrador Jurisdictions represented included Newfoundland and Labrador, and Canada.
- May 31, 2005 Calgary, Alberta Jurisdictions represented included British Columbia, Alberta, Saskatchewan, Manitoba, and Canada.
- June 6, 2005 St John's, Newfoundland and Labrador Concurrent with Federation of Canadian Municipalities
- June 9, 2005 Montreal, Quebec Jurisdictions represented included Quebec.
- June 13, 2005 Whitehorse, Yukon Jurisdictions represented included Yukon and Canada.
- June 15, 2005 Toronto, Ontario Jurisdictions represented included Ontario and Canada.
- July 7, 2005 Yellowknife, Northwest Territories Jurisdictions represented included Northwest Territories and Canada.

CCME also posted consultation documents to its website for 60 days in May and June 2005. At this time, public review and comment on the documents was welcome.

The summary below reflects broadly the range of public opinion communicated to the Development Committee; however, the summary does not include all comments received. To receive a copy of the full consultation report, please contact Jennifer Vigano at the CCME Secretariat (jvigano@ccme.ca) (available in English only).

#### **General Comments**

- There was broad support for all approaches identified to develop the strategy environmental risk management, a harmonized approach to regulation, coordinated science and research, and the economic and sustainable funding work.
- Involvement of municipalities and stakeholders is needed throughout the development of the strategy.
- Other issues identified which need consideration: biosolids, watershed management, stormwater, land use planning, and pesticides.
- A level playing field for the wastewater industry must be one outcome of the strategy.
  - Additional tools and guidance beyond the strategy are needed. Suggested areas included:
    - Allowable mixing zones (definition of, and corresponding conditions).
    - o Contaminant Database.
    - Best Practical Technologies for pretreatment.

- o Best Management Practices for industrial, commercial, and institutional discharges.
- Develop a model sewer use by-law.
- Summarize rational for each surface water quality guideline (pollutant, scientific rationale, primary loading sources to MWW system).
- Costing information for planning purposes.
- o Pollutant-specific adverse effects and guidance on how to investigate and measure.
- For low sampling frequencies, statistical analyses to ensure that effluent discharge objectives (EDOs) are met.
- o Environmental and ecosystem monitoring for different pollutants for MWWE.
- Protocol for statistical analysis.
- Implementation of the strategy must be flexible, fair, and timely. Any deadlines must be based on available funding. Application and implementation mechanisms should be developed to ease acceptance of the strategy.
- Public education and awareness need to be part of the strategy.
- Clarification on the roles and responsibilities for all elements of the strategy is needed.
- All environmental impacts and other environmental initiatives must be considered: decisions in one area will affect impact on another. For example, increased wastewater treatment will use more energy which impact on climate change (Kyoto). Identify the potential tradeoffs.
- A minimum level of environmental protection must be achieved across the country.
- Consider levels of impact by large, medium, and small communities. Consider frequency, duration, volume, season, municipality size, and current level of infrastructure.
- Compliance with and implementation of the strategy must be flexible. Consider that municipalities will be competing for resources.
- Explore specific jurisdictional problems facing First Nations. Examine the specific geographic setting and particular circumstances facing First Nations.

#### **Environmental Risk Management Model**

- General agreement with the proposed risk management approach.
- General agreement that a watershed approach is needed for environmental risk management, monitoring, and other aspects of the strategy. A watershed approach should consider all pollution inputs: point, non-point, multiple-point, industrial, agricultural, urban, etc.
- The concept of a mixing zone is supported, although clarification and guidance are needed.
- There was general support for consideration of the receiving environment in developing the different components of the strategy.
- The concept of performance standards or discharge limits is supported; however, opinion is diverse in the types of standards that should be developed: national or site-specific, environmental risk based or technology based. Some opinion held that a range of standards and limits are needed. It was generally agreed that standards for typical parameters are needed, but undecided how emerging parameters should be managed.
- National performance standards should be set for the typical parameters. Emerging parameters should be considered; however, unless sound science is available to enable the establishment of standards these should be managed on a site specific basis.
- Pre-treatment standards, source control of untreatable substances, product controls, and pollution prevention were considered to be an important part of developing a strategy. Municipal wastewater treatments plants cannot treat all components of the effluent therefore it is difficult to place the onus on the operator/owner to reduce at the source or remove untreatable substances. There was support for additional regulation at the federal level of such substances.
- Use the environmental risk management model to prioritize municipalities for high, medium, and low risk.
- The highest standard possible is needed to protect the environment.

- Monitoring is important and should consider which parameters are being monitored on a site specific or receiving environment basis. Monitoring requirements must be clearly defined.
- Examine non-point source pollution and assimilative capacity of the receiving environment.
- Clarify environmental risk concept, e.g. what level of risk is acceptable.
- Define "no impact" to receiving environment some discharges may result as having a beneficial or neutral impact (e.g. release causing increased vertebrate size, chemical parameters that are barely measurable).
- Some releases are beneficial to the environment. Nutrient release is considered beneficial in some areas; consider site specific releases of nitrogen and phosphorus. If a guideline is set for a potentially beneficial parameter, provide flexibility to increase/decrease concentrations based on site-specific environmental requirements.
- Compliance with environment discharge objectives would be ensured by permits which would be periodically reviewed.
- Given the financial constraints on small municipalities and the obligation to improve the environment, there should be a possibility that a less strict standard be adopted for these municipalities.
- Review the adequacy of existing water quality monitoring networks in Canada to ensure that effluent monitoring is adequate and useful information is captured. Also ensures effective overall water quality monitoring.

## Harmonization of the Regulatory Framework

- A model sewer-use bylaw is recommended for development. It would be a good reference tool and promote consistent municipal by-laws nationally.
- All agreed that clarification on the roles, responsibilities, and regulation at all levels of government is needed. A one-window approach which reduces approvals, and streamlines regulation and reporting is welcome. An integrated and complementary approach is needed.
- Certainty under the *Fisheries Act* is needed.
- A range of regulatory issues were identified: industrial discharge to the sanitary sewer and lack of source control; long term certainty; definition of deleterious discharges including ammonia; accountability; operator certification; seasonal and climate issues; inconsistency between provincial and federal regulations; lack of consideration of the receiving environment; and environmental quality goals.
- Source control and pollution prevention should be recognized and addressed.
- Use sewer use by-laws to regulate industrial, commercial and institutional discharge to municipal wastewater treatment plans (nationally/provincially), including First Nations.
- Consider small/rural communities with minimal tax base.
- Clarity is needed regarding the regulatory role of federal, provincial, and municipal governments with respect to First Nation and Aboriginal communities.
- Buy-in from federal and provincial health agencies is important.
- There is a lack of clarity on how the strategy will impact existing legislation. Will the current time/effort developing plans, completing environmental assessments and implement upgrades be made redundant and/or replaced with additional significant requirements from the CCME process?
- Implementation of the strategy should occur at the pace of individual jurisdictions and should allow adaptation to individual circumstances.

# **Coordinated Science and Research**

- Sound science is a must.
- Research needs to be fostered and coordinated. Available information must be national in scope and easily accessed. Municipalities and stakeholders are willing to share what information they have.

- A range of stakeholders need to be involved in managing research and information: municipalities, federal/provincial/territorial governments, academics, consultants, engineers, others interested stakeholders.
- Operational issues for northern and remote communities should be investigated.
- Support for the approach being taken to identify contaminants of potential concern.
- The list of contaminants should be prioritized.
- Long term research priorities should be identified.
- Support for a contaminant database was indicated. Most thought they would use one.
- Will the risk analysis consider climate change?
- Research user-friendly technologies for rural communities are needed.
- Information on the complete composition of wastewater effluent is needed. Information on effluent composition in other countries could be used to indicate what could be expected in Canadian effluent.

#### **Economic Implications**

- Funding opportunities should consider size of municipality, ability to pay/raise funds (population and per capita costs), industrial contributions, and population growth/decline. Consider on a case-by-case basis. Need to consider background levels, application of standardized models for freshwater lakes and rivers, and marine environments. Competitive pricing for models should also be considered. National targets with incentives and financial rewards to reach the targets are needed.
- Funding should be long-term and sustainable. National criteria could be developed and applied to disburse funds.
- Ensure the strategy emphasizes implementation costs and related funding mechanisms.
- Develop funding programs that are explicitly devoted to MWWE.
- Wastewater management districts could be considered to save money on infrastructure costs.
- Identify who will pay. Develop alternative funding opportunities.
- Flexibility with risk management will be needed because of the economic effects on municipalities.
- Political and financial resources are needed to support risk and economic management.
- Northern, remote and First Nation/Aboriginal communities have smaller resources and higher costs related to infrastructure (building and upgrading, can be 10-15 times more expensive). Need to consider this in the implementation of the Strategy.
- Develop a comparison of costs of MWWE relative to other household utilities (e.g. water, power, heat, telephone, etc.) and other factors such as remoteness, capacity, household income ranges.
- Secondary treatment focuses on reduction of biochemical oxygen demand and total suspended solids. Tertiary treatment includes disinfection, ammonia removal/nitrification. This needs to be considered in developing a Canadian economic baseline and associated economic implications.
- Municipal investment in infrastructure upgrades should be accounted for under the strategy, especially as it relates to sustainable funding mechanisms.
- Encourage municipalities to set up water funds to finance wastewater projects.
- Develop affordability criteria.
- Consider the financial impacts of minimum treatment standards and consider if they are actually needed.
- Consider operation and maintenance costs in the development of the strategy.